ENVIRONMENTAL ASSESSMENT
Little Mountain Activity Plan and Off-Highway Vehicle (OHV) Route Designations

WY020-EA05-49

BLM

Wyoming State Office – Cody Field Office

October 2006

MISSION STATEMENT

It is the mission of the Bureau of Land Management to sustain the health, diversity, and productivity of the public lands for the use and enjoyment of present and future generations.

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CODY FIELD OFFICE
ENVIRONMENTAL ASSESSMENT

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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Proposed Action Title/Type: Little Mountain Activity Plan Environmental Assessment		
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Author: Valentine		Date: 3/1/2006

1.0 Introduction

1.1 Purpose and Need

The proposed action is to develop an activity plan and environmental assessment (EA) for the Little Mountain planning area approximately 13 miles east of Lovell, Wyoming. The area consists of 69,044 acres of public land located in Big Horn County, north of U.S. Highway Alternate 14, south of the Crow Indian Reservation and the Montana state line, east of the Bighorn Canyon National Recreation Area, and west of the Bighorn National Forest, as shown in Figure 1, Little Mountain Activity Plan, page 2.

The planning area includes the Little Mountain Area of Critical Environmental Concern (ACEC), the Five Springs Falls ACEC, a portion of the West Slope Special Recreation Management Area (SRMA), a portion of the Worland Caves SRMA, Suitable Wild and Scenic River Segments, and recently acquired lands on Little Mountain, formerly the Devil's Canyon Ranch lands. Preparation of an activity plan will meet the direction contained in the Cody Resource Management Plan (RMP) to complete activity plans for ACECs and SRMAs. The plan would serve as guidance for managing multiple resources and activities including management of the special area designations, travel management and access, future development of recreation facilities, implementation of range improvements, hazardous fuels reduction projects, and management of crucial winter range and other important fish and wildlife habitat.

The activity plan would include a comprehensive travel management plan to implement the Off-Road Vehicle (ORV) decisions that were made in the Cody RMP, 1990, that restrict vehicular travel to designated roads and trails. The activity plan would be in accordance with the Cody RMP management objective: "to maintain or enhance opportunities for ORV use while protecting or avoiding adverse effects of vehicular travel on other resource values." The term "off-road vehicle" (ORV) and "off-highway vehicle" (OHV) will be used interchangeably for this planning effort.

The decision to allow use of motorized vehicles on designated roads and trails in the Little Mountain area was analyzed in the Cody RMP Environmental Impact Statement (EIS) and documented in the Cody RMP Record of Decision (ROD). The need for the proposed action is to determine which roads and trails to designate for motorized vehicle use, which trails and areas to designate for non-motorized recreation opportunities, and how they will be identified on-the-ground.

Planning is needed to integrate management of multiple resources, resource designations, and activities in the planning area. Management of OHVs on BLM administered public land is necessary to address public and administrative access needs, protect resources, promote public safety, and minimize conflicts among the various uses of public lands.

1.2 Decisions to be Made

1.2.1 Special Designations and Other Resources

The activity plan would document the management objectives and decisions that were made in the Cody RMP and in any subsequent activity level planning that has been completed for the special designations and various other resources within the planning area. The activity plan would provide a framework for future management considerations that integrates the multiple and complex resource values in the planning area. The action items listed in the activity plan would serve to document and prioritize specific actions to be completed on-the-ground to implement the planning decisions and meet the resource management objectives.

This planning effort will also identify any RMP level planning decisions that may need to be reconsidered or updated during the RMP revision process that is scheduled to begin in 2007 (refer to section 1.4.6 – Issues Beyond the Scope of this Plan).

1.2.2 Travel Management and Access

The activity plan would implement the existing Cody RMP ORV decisions: “vehicles limited to designated roads and trails” in a majority of the planning area, “vehicles limited to existing roads and trails” in the southwest portion of the planning area, and “closed to vehicular use” in the Five Springs Falls ACEC. Decisions must be made regarding two key access related issues that have been identified within the planning area:

Devil’s Canyon Road and Gate

It has been determined that the gate on BLM managed public lands at the top of Devil’s Canyon is in an appropriate location, based on the surrounding topography, public safety concerns associated with the steep grades of the road, resource values in the canyon, and the needs of the private landowners and grazing operators. This decision was made based on assessments from the BLM civil engineers and other resource specialists. The gate will be formally authorized by BLM and jointly controlled by the BLM and the grazing operator. The Little Mountain activity plan would clarify management of the gate and alternatives will be considered regarding public access through the gate.

Seasonal Closure

A seasonal closure (December 1 – April 30) to motorized vehicles to protect big game crucial winter range on the top of Little Mountain has been proposed. The Wyoming Game and Fish Department recommended a seasonal closure from December 1 – March 31, the proposed seasonal closure date was extended to April 30 to be consistent with other seasonal closures in the BLM Cody Field Office area. Implementation of the seasonal closure as proposed and potential alternatives will be considered during this planning process.

1.3 Relationship to Statutes, Regulations, Policies, Plans or Other Environmental Analyses

The principal Bureau permitting regulations for ORVs are found in 43 CFR 8340 and Executive Order 11644 (as amended by Executive Order 11989) issued in 1972. The principal statute law governing public land management is the Federal Land Policy Management Act (FLPMA) of 1976. This environmental assessment is being prepared in compliance with the National Environmental Policy Act of 1969. The federal laws providing regulatory authority for the protection of cave and cultural resource on public lands are the Federal Cave Resources Protection Act of 1988, the Archeological Resources Protection Act of 1979, the Antiquities Act of 1906, the Native American Grave Protection and Repatriation Act of 1990, and 43 CFR 8365.1-5.

The following national strategies were prepared to provide guidance in the travel management planning process:

> National Management Strategy for Motorized Off-Highway Vehicle Use on Public Lands. U.S. Department of the Interior. Bureau of Land Management. January 2001.
>
> National Mountain Bicycling Strategic Action Plan. U.S. Department of the Interior. Bureau of Land Management. November 2002.
>
> The BLM's Priorities for Recreation and Visitor Services. BLM Workplan Fiscal Years 2003-2007. U.S. Department of the Interior. Bureau of Land Management. May 2003.
>
> Roads and Trails Terminology Report. U.S. Department of the Interior. Bureau of Land Management. Washington Office Instructional Memorandum No. 2006-173. April 2006.

Additional guidance for management of motorized vehicles on BLM-managed public lands in Wyoming is available in the following document:

> Travel Management Guidelines for the Public Lands in Wyoming (Instructional Memorandum No. WY-2005-034), March 10, 2005.

The following environmental assessments were completed, with public participation, in association with the range improvements, hazardous fuels reduction plans, allotment management plans, wildlife assessments, and recreation sites within the planning area.

> Environmental Assessment for the West Slope of the Bighorn Mountains Habitat Management Plan, March, 1984. EA Number: WY-012-1211

Cottonwood Creek Trailhead and Associated Trails Project Plan and Environmental Assessment, September, 2004. EA Number: WY-020-E04-125.

Issue Special Recreation Permit for conducting recreational activities on Little Mountain and in several grazing allotments off the mountain, June, 2004. EA Number: WY020-E04-091.

Bischoff Enterprises Management/Projects, August, 1997. EA Number: WY-017-EA7-075.

Moss Ranch/Devils Canyon Grazing Agreement and Project Proposal, August, 1995. EA Number: WY-014-EA5-026.

Devils Canyon Area Prescribed Burns, October, 1994. EA Number: WY-014-EA4-072.

This environmental assessment is tiered to, and incorporates the following documents by reference: The Cody Resource Management Plan (RMP) and Environmental Impact Statement (EIS), 1990. The RMP specifies general management direction for the Cody Field Office, including management of ORVs. The EIS contains background information on the existing environment and resources found in the area and environmental consequences of various management actions.

1.3.1 Summary of Management Objectives from Cody RMP

Little Mountain Area of Critical Environmental Concern
The objectives for management of the Little Mountain ACEC are to protect and manage important cave, cultural, and paleontological resources, and to maintain scenic values.

Five Springs Falls Area of Critical Environmental Concern
The objective for management of the Five Springs Falls ACEC is to protect existing populations of four near-endemic rare and sensitive plant species in the Five Springs Falls area.

Cody RMP Cultural and Paleontological Resources Management Objective
The cultural and paleontological management objective is to protect, study, and expand the interpretation of these resources.

Cody RMP Off-Road Vehicle Management Objective
The off-road vehicle (ORV) management objective is to maintain or enhance opportunities for ORV use while protecting or avoiding adverse effects of vehicular travel on other resource values.

Cody RMP Recreation Management Objective
The recreation management objective is to enhance opportunities for primitive recreation, while increasing visitor services in some areas (to meet needs for more developed forms of recreation).
Cody RMP Wildlife and Fish Habitat Management Objective

The wildlife and fish habitat management objective is to maintain and enhance fish and wildlife resources so that the forage production and quality of rangelands and fish and wildlife habitat will be maintained or improved.

Cody RMP Livestock Grazing Management Objective
The livestock grazing management objective is to improve forage production and ecological range condition for the benefit of livestock use, wildlife, and watershed resources.

Cody RMP Visual Resource Management Objective
The visual resource management objective is to maintain or improve scenic values and visual quality throughout the planning area.

Cody RMP Watershed Management Objective
The watershed management objectives are to stabilize and conserve soils, increase vegetative production, and to maintain or improve water quality.

Cody RMP Forestland Management Objective
The forestland management objective is to improve forest resource and wildlife habitat values.

The Wyoming Bureau of Land Management Standard Mitigation Guidelines for Surface Disturbing Activities are found on page 59 of the Cody RMP/ROD.

1.3.2 List of Other Planning Documents

The following activity level management plans were developed in accordance with the Cody RMP. The relevant objectives and management actions will be incorporated into the Little Mountain Activity Plan. The referenced documents are available for review in the BLM Cody Field Office.

- West Slope Habitat Management Plan, March 1984
- Worland District Cave Management Plan, September 1992
- Allotment Management Plans: Moss Ranch Resource Grazing Agreement AMP, March, 1994. and Bischoff Enterprises Management Agreement, April, 1997
- Cody Field Office Review of Potential Wild and Scenic Rivers in the Cody RMP Planning Area, January 2003
- Cottonwood Creek Trailhead and Associated Trails Project Plan, September, 2004.

1.4 OVERVIEW OF THE PLANNING PROCESS

1.4.1 Assessment of Planning Decisions

All planning documents and decisions relevant to the planning area were reviewed to determine the status of their implementation and to determine if any changes or modifications are needed. An interdisciplinary team of resource specialists in the BLM Cody Field Office were consulted regarding the status of the existing planning documents and the development of action items for the activity plan. All action items specified in the Little Mountain Activity Plan will be consistent with management decision identified in the Cody RMP and in the previously

completed activity level planning documents. Additional resource specific plans may be prepared for the area in the future.

1.4.2 Inventory

An inventory of the roads and trails in the planning area was completed using Global Positioning System (GPS) and Geographic Information System (GIS) technology, aerial photos, topographic maps, and historic information. Maps: 1 and 2, Little Mountain Planning Area Alternative 1 and Alternative 2, represent all routes known to exist as of July 2006. A comparison of the current route inventory with the 1994 digital orthophoto quads and the 1989 air photos was conducted to determine if any unauthorized routes had been created since 1990, the date of completion of the Cody RMP. The review resulted in identification of five segments of unauthorized, user created routes, each less than ¼ mile in length located in T. 57 N., R. 94 W. Sec. 13, T. 58 N., R. 94 W. Sec 20, 25, 27, and T. 58 N., R. 93 W. Sec. 24.. The five unauthorized route segments are recommended for closure in Alternatives 1 and 2 of this environmental assessment.

Upon completion of the activity plan, a decision record would approve the official Little Mountain Travel Management Map showing the designated network of routes. Any modifications or additions would be addressed through the appropriate level of NEPA analysis as specified in the implementation section of the activity plan.

1.4.3 Criteria and Route Assessment

The criteria for consideration of route designations and route closures were developed by the BLM Cody Field Office and used by an interdisciplinary team to assess the route inventory map and make initial road use recommendations. The criteria are listed in the activity plan, page 27-28.

1.4.4 Public Involvement

The ORV designation decisions for the Little Mountain area were made with public participation during the Cody RMP planning process. The “Notice of Approved Off-Road Vehicle Management Decision, Cody Resource Area, Wyoming” was published in the Federal Register in August 1990.

News releases were published in local newspapers, and posted on the BLM Cody Field Office website, announcing the planning process and the open house meeting opportunities.

On March 16, 2004, a public informational session was held at the Lovell Fire Hall. The meeting was attended by approximately 50 people. A total of eight written comments were received from this information session. The comments addressed a concern of excess grazing on Little Mountain, support for closing roads and especially trails to OHV traffic, support of winter road closures for wildlife, although the length of closure was questioned, concern of the effects of road closures on people with disabilities and concern about the size and effect of the region’s elk herds.

On June 29, 2004, the BLM, in cooperation with the Trust for Public Land (TPL) and Wyoming’s Big Horn County Commissioners held a dedication to celebrate the public

acquisition of the Devil's Canyon Ranch that was acquired in June of 2003. Several dignitaries and cooperators were featured speakers during the dedication ceremony including: Senator Craig Thomas of Wyoming's congressional delegation; James H. Hughes, BLM's Deputy Director for Programs and Policy; Will Rogers, Alan Front, and Alex Dikemann, president, senior vice-president of federal affairs, and project manager respectively from the TPL; Blake Henning, Wyoming regional director of the Rocky Mountain Elk Foundation; Big Horn County Commissioner, Keith Grant; BLM Wyoming State Director, Bob Bennett, and Mike Blymyer, BLM Cody Field Manager. The ribbon-cutting officially opened and dedicated the Little Mountain – Devil's Canyon Ranch as part of the public lands under the administration of the BLM.

On March 4, 2005 an initial scoping notice was mailed for a 30-day comment period and an open house meeting was held at the Lovell Fire Hall on March 22, 2005 to initiate this planning process. The meeting was attended by approximately 22 people. A total of five written comments were received from this information session. BLM staff members were available for additional open house meeting time on March 23 -29, 2005 during regular business hours. A total of 20 written comments were received and three comments were discussed with a BLM staff member over the phone during the scoping period. Overall, the comments were supportive of the activity plan and provided suggestions for on-the-ground implementation; others expressed opposition to any ORV designations or limitations to travel by motorized vehicles. The comments were considered during development of the alternatives for this environmental assessment (EA) and specific suggestions were incorporated into the action items within the activity plan where appropriate. The comments received during these public involvement opportunities will be considered during this planning effort. Specific comments relating to the predominant uses and resources in the planning area were requested, including recreation, travel management and access, wildlife, range, caves, wild and scenic rivers, cultural, paleontological, visual resources, and minerals. A 30-day review and public comment period will be provided following completion of the draft plan and this environmental assessment.

On August 17, 2006 a letter was mailed to provide notification of the availability of the Draft Little Mountain Activity Plan and Off-Highway Vehicle (OHV) Route Designations and the associated Environmental Assessment (EA) and to initiate a 30-day public comment and review period (August 17 – September 18, 2006). An open house meeting was held at the Lovell Fire Hall on September 7, 2006 to provide an opportunity for the public to ask questions, review the maps, and to complete comment forms. The meeting was attended by approximately 11 people. A total of 17 written comments were received during the 30-day comment period. The comments were considered and specific suggestions were incorporated into the environmental assessment (EA) and the activity plan where appropriate. A summary and response to the public comments with page references to the EA and activity plan was prepared. The "Little Mountain Activity Plan and Off-Highway Vehicle Route Designations Public Comment Summary and Response" table is included as Appendix 2 of the EA.

1.4.5 Identified Issues

- Management of the increasing recreation use of Little Mountain.
- Potential for increasing impact to archaeological and paleontological resources associated with increasing use of the area.

- Lack of legal motorized vehicle access to portions of the planning area and resource concerns with the use of motorized vehicles on some portions of the planning area.
- Development of an effective signing strategy for the area.
- Relative impact of various modes of travel on wildlife populations and habitat.

The following issues were derived from comments received from both those who did and did not attend the public meetings. There were 42 total comments made about the Little Mountain plan. In parenthesis after each issue is the number of times that comment was made by various members of the public out of the 42 responses received.

Issues about OHVs

- Strict law enforcement, noticeable fines, and proper monitoring of unauthorized OHVs (4)
- Clearly designate and mark roads that are useable to OHVs (5)
- Prohibit most OHV use from ACECs (1)
- Leave all roads open to OHVs; no new road closures (1)
- Do not develop any new OHV roads (7)
- Do not support the closure of Cottonwood Trail to OHVs so far down (1)
- Want to be able to use OHVs past the locked gate at Devil's Canyon (1)
- Want the trail south of Natural Trap to Bighorn Lake to be open to OHVs (1)
- Keep the road over the top of Mexican Hill to USFS land open to OHVs (1)
- Keep the road to Moss Ranch open to OHVs (1)
- Create special OHV routes that will not negatively impact other public values (2)
- Restore damage from past unauthorized OHV routes (2)
- Support closing Cottonwood Canyon and Pete's Canyon trails to OHVs (5)
- Support a strong barrier at Cottonwood Canyon Trailhead to keep OHVs out (1)
- Do not support the closure of Pete's Canyon and Cottonwood Canyon trails to OHVs (1)
- Encourage the possible Hayes-Cottonwood Canyon Trail loop to be non-motorized (1)
- Prepare an EIS in response to the OHV activity plan (1)

Issues about Travel, Roads, and Access

- Clearly sign closed roads (1)
- Restrict travel only to BLM designated roads (1)
- Mark private property boundaries directly at the boundary (1)
- Leave the management of Devil's Canyon Road up to EO Ranch, not the BLM (1)
- Keep the road over the top of Mexican Hill to USFS land open to ORVs (1)
- Keep the road to Moss Ranch open to ORVs (1)
- Let the EO Bischoff partners control access to Devil's Canyon (1)
- Support seasonal road closures for wildlife on top of Little Mountain, but not near the caves or Porcupine Creek (1)
- Support the closure of unauthorized existing roads to motorized vehicles (13)
- Existing roads/ motorized vehicle travel should be terminated at Devil's Canyon parking and camping area (12)
- Eliminate duplicate roads (6)

- Strongly support seasonal road closure for wildlife (1)
- Too many roads are still open (3)
- Against the road closure of roads for wildlife only until March 1st instead of April 1st (1)
- Improve the road to Hayes Trail (1)
- Provide ample non-motorized areas for hikers and horseback riders (4)

Issues about Cottonwood Canyon, Pete's Canyon, and Hayes Trails

- Develop a trail from Medicine Wheel through the Big Horn National Forest and BLM lands to Big Horn Canyon (1)
- Trail maintenance is pointless if livestock trails over it (2)
- End cattle trailing over Cottonwood Trail (2)
- Enjoy Cottonwood Canyon and related trails (2)
- Support improving Cottonwood Canyon Trailhead (1)
- Keep the parking area of Cottonwood Canyon Trail out of the canyon (1)
- Avoid trail maintenance during critical times for wildlife (1)
- Support keeping Little Mountain trails open to mountain bikes (2)
- Cottonwood Canyon Trail needs better maintenance and design (1)
- Support of a Cottonwood Canyon-Hayes Trail loop foot and horseback trail (2)
- Improve Cottonwood Canyon Trail before creating a loop with Hayes Trail (1)

Issues about Minerals and Mines

- Close Little Mountain to mineral entry and refrain from leasing land (2)
- Reclaim old mines for groundwater safety and aesthetic values (1)

Issues about Archaeology

- Protect high potential and high visibility archaeology sites (6)
- Conduct a thorough cultural survey of Little Mountain (7)

Issues about Grazing and Livestock

- Support a grazing ban until the wildlife habitat has improved (2)
- Agree that Little Mountain is overgrazed (4)
- Do not support the BLM buying land from Bischoff and then allowing him to lease it (1)

Issues about Wildlife

- Conduct a thorough survey of wildlife and wildlife habitat (6)
- Give wildlife a high priority (1)
- Find out the effects of the elk population on forage, brucellosis, and mule deer populations if there is a road closure to protect winter range (1)

Other Issues

- Do not continue scoping until the BLM road inventory is complete (1)
- Designate Devil's Canyon and Porcupine Creek as a Wild and Scenic River (12)
- Recommend Devil's Canyon Ranch and Little Mountain ACEC as a Wilderness Study Area (WSA) (14)

- Allow recreation, but not to the extent that it is destructive (1)
- Support prescribed burning on Hayes Trail to reduce fire hazard (1)

1.4.6 Issues beyond the Scope of this Plan

Some issues were identified through public involvement efforts and during the interdisciplinary staff review that are beyond the scope of this activity level planning effort. The goal of the Little Mountain activity planning effort is to implement existing decisions that were made in the Cody RMP and in subsequent planning documents. The following issues are being documented as potential items to be addressed in the revision of the Cody RMP that is scheduled to begin in October of 2007. They will not be further analyzed in this activity plan.

- Expanding the mineral withdrawal area around the caves.
- Pursuing mineral withdrawals for the Classification & Multiple Use (C&MU) closures and for the Cottonwood Canyon Trailhead area.
- Pursuing a closure to leaseable minerals above known caves and cave passages.
- Expanding the Little Mountain ACEC.
- Expanding the West Slope SRMA.
- Development of management prescriptions for individual caves on Little Mountain, these will be developed later as part of implementation of the Worland Caves Management Plan.

2.0 PROPOSED ACTION AND ALTERNATIVES

2.1 Alternative 1 – Proposed Action – Approve the Little Mountain Activity Plan

Alternative 1, the Proposed Action, would approve the Little Mountain Activity Plan and associated implementation actions. The plan will be referred to as the "activity plan" in this document.

The objectives that would be met by implementing the proposed action include:

- Ensuring that the resource values of the Special Management Areas including, ACECs, SRMAs, and Wild & Scenic River suitable segments are maintained.
- Stopping the proliferation of unauthorized roads and trails.
- Closing certain roads that are unnecessary and are causing resource degradation.
- Having a clearly defined road network that is understandable to the public, provides needed access, does not cause resource degradation, and is enforceable.

2.1.1 Special Designations and Other Resources

The activity plan would provide a framework for future management considerations that integrates the multiple and complex resource values in the planning area. The Action Items listed in the activity plan would serve to document and prioritize specific actions to be completed on-the-ground to implement the planning decisions and meet the resource management objectives.

2.1.2 Travel Management and Access

The ORV designations would be implemented according to Map 1: Little Mountain Planning Area – Alternative 1, showing the road use recommendations in the following categories, "Open to motorized vehicles", "ATV and non-motorized use only", or "Close to motorized vehicles". The route designations would apply only to BLM administered public land and would be clearly identified by maps, information signs, and route markers as specified in the activity plan. The management actions are described in detail in the activity plan.

The activity plan identifies specific action items to implement the designations and achieve the following goals and objectives:

- Maps: Produce an official travel management map to document route designations.
- Signs and Markers: Identify the designated routes on-the-ground in a clear and consistent manner to facilitate compliance and enforcement of the route designations.
- Education and Information: Provide clear and consistent information related to the route designations and the implementation process that will help ensure public understanding and compliance with the designations.
- Barriers: Use physical barriers if necessary to discourage use and allow rehabilitation of closed routes.
- Rehabilitation: Apply rehabilitation techniques to closed routes where necessary to speed the healing process, discourage use of closed routes, and minimize the impact on visual resources.
- Monitoring: Identify specific actions, including timeframes, methods, and anticipated resource needs for environmental monitoring.
- Enforcement: Identify specific actions, including timeframes, methods, and anticipated resource needs for compliance and enforcement related to the route designations and other implementation actions.
- Maintenance: Document maintenance standards and needs.
- Implementation: Implement the action items specified in this plan in a consistent and timely manner.
- Specific Projects: Throughout this planning process, potential travel and access related projects were identified. The objective of this section of the plan is to document the projects to be implemented upon completion of this plan and to document ideas for future consideration through the appropriate planning processes.

The activity plan would initially be implemented in the summer of 2007, with additional signing and rehabilitation completed in subsequent years, as funding allows. Monitoring and enforcement of the route designations would be ongoing, as specified in the plan.

Devil's Canyon Road and Gate

In alternative 1, the gate would be modified to allow public, non-motorized access only (foot, horseback, mountain bike). Full size vehicles and ATVs would be allowed only for administrative purposes and for access to private land and associated commercial operations by a right-of-way holder. A legal public access route to the gate would be pursued for development in the future as described in the plan. See the Travel Management "implementation" section of the activity plan, page 39.

Seasonal Closure

In alternative 1, the seasonal closure to motorized vehicles would be implemented for the top of Little Mountain from December 1 - April 30 to protect crucial big game winter range. The seasonal closure would allow exceptions for approved administrative uses, and for modified closure dates as determined necessary by the BLM Authorized Officer. The criteria for modified closure dates would include assessment of weather conditions, snow accumulation, and observations of wintering wildlife. Exceptions for emergency circumstances such as fire or search and rescue, as described in 43 CFR 8340 would also be allowed. The approximate seasonal closure gate locations are shown on Maps 1 and 2, actual gate locations would need to be determined on-the-ground during implementation to ensure adequate vehicle turn around points. See the Travel Management "implementation" section of the activity plan, page 40.

Mountain Bike Use

In alternative 1, mountain bike use would not be allowed on Cottonwood Creek Trail. The trail would be designated for foot and horseback use only. This recommendation is due to safety concerns related to concentrated equestrian use and limited sight distance and steep grades. Mountain bike use would not be allowed within "wild" segments of the suitable Wild and Scenic Rivers. Mountain bike use would be allowed on all other roads and trails within the Little Mountain planning area.

2.2 Alternative 2 – Resource Protection Alternative

Alternative 2, the Resource Protection alternative would approve the Little Mountain Activity Plan and associated implementation actions with the modifications described below. The Resource Protection alternative represents a majority of the route closure recommendations that were suggested for the protection of cultural resources, wildlife, and soil resources.

2.2.1 Special Designations and Other Resources

Same as alternative 1.

2.2.2 Travel Management and Access

The ORV designation, "limited to designated roads and trails" would be implemented according to MAP 2: Little Mountain Planning Area - Alternative 2, showing the road use recommendations in the following categories, "Open to motorized vehicles", "ATV and non-motorized use only", or "Close to motorized vehicles". The route designations would apply only to BLM administered public land and would be clearly identified by maps, information signs, and route markers as specified in the activity plan. The management actions are described in detail in the activity plan.

Devil's Canyon Road and Gate

Same as alternative 1.

Seasonal Closure

In alternative 2, the seasonal closure to motorized vehicles would be implemented for the top of Little Mountain from December 1 - April 30 to protect crucial big game winter range. No modifications or exceptions would be allowed except for emergency circumstances such as fire or search and rescue, as described in 43 CFR 8340. The approximate seasonal closure gate

locations are shown on Maps 1 and 2, actual gate locations would need to be determined on-the-ground during implementation to ensure adequate vehicle turn around points.

Mountain Bike Use

Same as alternative 1.

2.3 Alternative 3 – Access Alternative

Alternative 3, the Access Alternative would approve the Little Mountain Activity Plan and associated implementation actions with the modifications described below. The Access Alternative would maximize public access in the planning area and would designate all existing routes as open for travel by motorized vehicles.

2.3.1 Special Designations and Other Resources

Same as alternative 1.

2.3.2 Travel Management and Access

Alternative 3 would designate all existing routes as "Open to motorized vehicles", all of the existing routes are shown on Maps 1 and 2. This alternative would approve the Little Mountain Activity Plan and associated implementation actions with modifications to the route designation categories and action items. Under this alternative, no routes would be designated in the "ATV and non-motorized use only", or "Closed to motorized vehicles" categories. No action items would be necessary in the "barrier" and "rehabilitation" categories, since no routes would be closed under this alternative.

Devil's Canyon Road and Gate

In alternative 3, the gate would be modified to allow limited public access with ATVs, no full size vehicles. Public access by foot, horseback, or mountain bike would also be allowed. Public access would be limited as needed to facilitate the cattle trailing up and down the narrow canyon road and to address resource concerns and user conflicts. ATV limitations would be developed in cooperation with the private landowner and other BLM resource specialists. Implementation of a permit system administered by BLM would be considered. A monitoring system based on the concept of "Limits of Acceptable Change" would be developed to assess the need for ATV use limitations. Full size vehicles and ATVs would be allowed for administrative purposes and for access to private land and associated commercial operations by a right-of-way holder.

Seasonal Closure

In alternative 3, the seasonal closure would not be implemented.

Mountain Bike Use

In alternative 3, mountain bike use would be allowed on the Cottonwood Creek Trail. Information signs would be posted prominently at the trailhead and periodically along the trail to promote user ethics on a shared trail. Information signs would be based on the Leave No Trace, Outdoor Skills and Ethics booklet "Mountain Biking", the Tread Lightly! Inc. "Guide to Responsible Mountain Biking" and the International Mountain Bicycling Association's "Rules of the Trail." Signs would be posted to indicate that mountain bikes should yield to both hikers and horseback riders and hikers should yield to horseback riders. This information would be

necessary to warn trail users of safety concerns related to concentrated equestrian use and limited sight distance and steep grades. Mountain bike use would not be allowed within "wild" segments of the suitable Wild and Scenic Rivers. Mountain bike use would be allowed on all other roads and trails within the Little Mountain planning area.

2.4 Alternative 4 – No Action

Alternative 4, the No Action alternative would be a continuation of existing conditions. The Little Mountain Activity Plan and associated implementation actions would not be approved.

2.4.1 Special Designations and Other Resources

All existing planning documents and decisions would remain in effect. A framework for future management considerations would not be developed to integrate the multiple and complex resource values in the planning area. Resource management decisions would continue to be implemented as needed by individual resource specialists, but would not be prioritized in an activity plan.

2.4.2 Travel Management and Access

Motorized travel would be allowed on existing roads and trails with no specific route designations, travel management plan, or rehabilitation efforts. An appropriate network of vehicle routes would not be analyzed or designated, leaving the area susceptible to route proliferation due to cross-country travel. Visitor use levels and resource concerns would continue to increase, as is the current trend. ORV management necessary to address public and administrative access needs, protect resources, promote public safety and minimize conflicts among various uses of public lands would not be implemented. The ORV designations in the Cody RMP of "limited to designated roads and trails" would not be implemented.

Devil's Canyon Road and Gate

In Alternative 4, the gate would remain locked and public access would be controlled by the private landowner. Currently the private landowners control the gate and have allowed vehicular access through the gate to BLM employees for administrative purposes, BLM permitted outfitters, and to those assisting with their grazing and ranching operations. They have also allowed some members of the public to obtain a key for vehicular access upon request, but have denied vehicular access to others. Generally, the public can go around the gate via foot to gain access to the public land.

Seasonal Closure

In alternative 4, the seasonal closure would not be implemented.

Mountain Bike Use

In alternative 4, mountain bike use would be allowed on the Cottonwood Creek Trail. Mountain bike use would not be allowed within "wild" segments of the suitable Wild and Scenic Rivers. Mountain bike use would be allowed on all other roads and trails within the Little Mountain planning area.

Table 1

Comparison of	Devil's Canyon Road and	Seasonal Closure	Mountain Bike Use

Alternatives	Gate		
Alternative 1 – Proposed Action	Non-motorized public access	December 1 – April 30 with administrative flexibility	Mountain bike use not allowed on Cottonwood Creek Trail or in "wild" segments of suitable Wild and Scenic Rivers, allowed on other roads and trails.
Alternative 2 – Resource Protection Alternative	Non-motorized public access	December 1 – April 30 without administrative flexibility	Mountain bike use not allowed on Cottonwood Creek Trail or in "wild" segments of suitable Wild and Scenic Rivers, allowed on other roads and trails.
Alternative 3 – Access Alternative	ATV and non-motorized public access	None	Mountain bike use allowed on Cottonwood Creek Trail with user ethics information regarding shared trails prominently posted; not allowed in "wild" segments of suitable Wild and Scenic Rivers, allowed on other roads and trails.
Alternative 4 – No Action	Existing situation – vehicle access controlled by private landowner	None	Mountain bike use allowed on Cottonwood Creek Trail, not allowed in "wild" segments of suitable Wild and Scenic Rivers, allowed on other roads and trails.

2.5 Alternatives Considered but Eliminated from Detailed Analysis

An alternative would be to close all routes in the planning area to motorized vehicle use, or to close all routes except for the mainline BLM system roads. These alternatives would maximize stability of the soils and vegetation in the area and would minimize disturbance to wildlife and cultural resources. However, these alternatives would not meet the variety of access needs that have been identified, and would not be consistent with the ORV management objective in the Cody RMP *"to maintain or enhance opportunities for ORV use while protecting or avoiding adverse effects of vehicular travel on other resource values"*. These alternatives would not fulfill the purpose and need for the activity plan, therefore no further analysis of these alternatives is necessary.

Another alternative would be to designate a portion of the planning area as open to cross-country travel for an ORV play area. This alternative would not be consistent with the designation of "limited to designated roads and trails." The decision to limit travel in the Little Mountain area was made with public participation during the Cody RMP planning process. The ORV designations can only be changed through the land use planning process during an RMP amendment or revision. The purpose of this activity plan is to implement the existing decision. This alternative would be beyond the scope of this implementation process, therefore no further analysis of this alternative is necessary.

3.0 AFFECTED ENVIRONMENT

3.1 General Area Description

The Little Mountain Planning area is located east of Lovell, Wyoming. The area consists of 69,044 acres of public land located in Big Horn County, north of U.S. Highway Alternate 14, south of the Crow Indian Reservation and the Montana state line, east of the Bighorn Canyon National Recreation Area, and west of the Bighorn National Forest, as shown in Figure 1 in the activity plan, page 2. The elevation ranges from 4000 feet at the mouth of John Blue Canyon to 7400 feet near the Bighorn National Forest boundary. The terrain near the highway is flat to gently rolling, the northern portion of the planning area consists of forested foothills and steep, rugged canyons.

Table 2 below shows the land ownership acreage within the planning area and Table 3 lists the miles of road by road type based on the planning area route inventory.

Table 2

Little Mountain Activity Planning Area – Surface Ownership Acreage	
Surface Owner	**Acres**
Bureau of Land Management	69,044
Bureau of Reclamation	79
State of Wyoming	5,290
Private	14,675*
Total:	**89,088**

* includes 2,979 acres owned by the Trust for Public Lands that is currently open to the public for recreational purposes.

Table 3

Little Mountain Activity Planning Area – Route Inventory Statistics	
Road Type	**Miles**
2-track trail	215
ATV trail	1
Graded Dirt Road	53
Gravel Road	1.5
Secondary Road	3.5
Highway	12.5
Naturally Re-vegetating	7
Total:	**293.5**

*Note: approximate mileage calculated from ArcMap data

3.2 Devil's Canyon Acquisition

The 8,200-acre land acquisition was completed in June 2003, through the perseverance of Senator Craig Thomas and Big Horn County Commissioner Keith Grant, along with work by national conservation groups (The Trust for Public Land and The Rocky Mountain Elk Foundation), and the BLM. The acquisition improved access to thousands of acres of public land on the western slope of the Bighorn Mountains. The land was formerly part of the Devil's Canyon Ranch, and is surrounded entirely by public lands, with the Bighorn National Forest and the Medicine Wheel National Historic Landmark to the east and south, the Yellowtail Reservoir and Big Horn Canyon National Recreation Area to the west, and the BLM's Little Mountain Area of Critical Environmental Concern to the north.

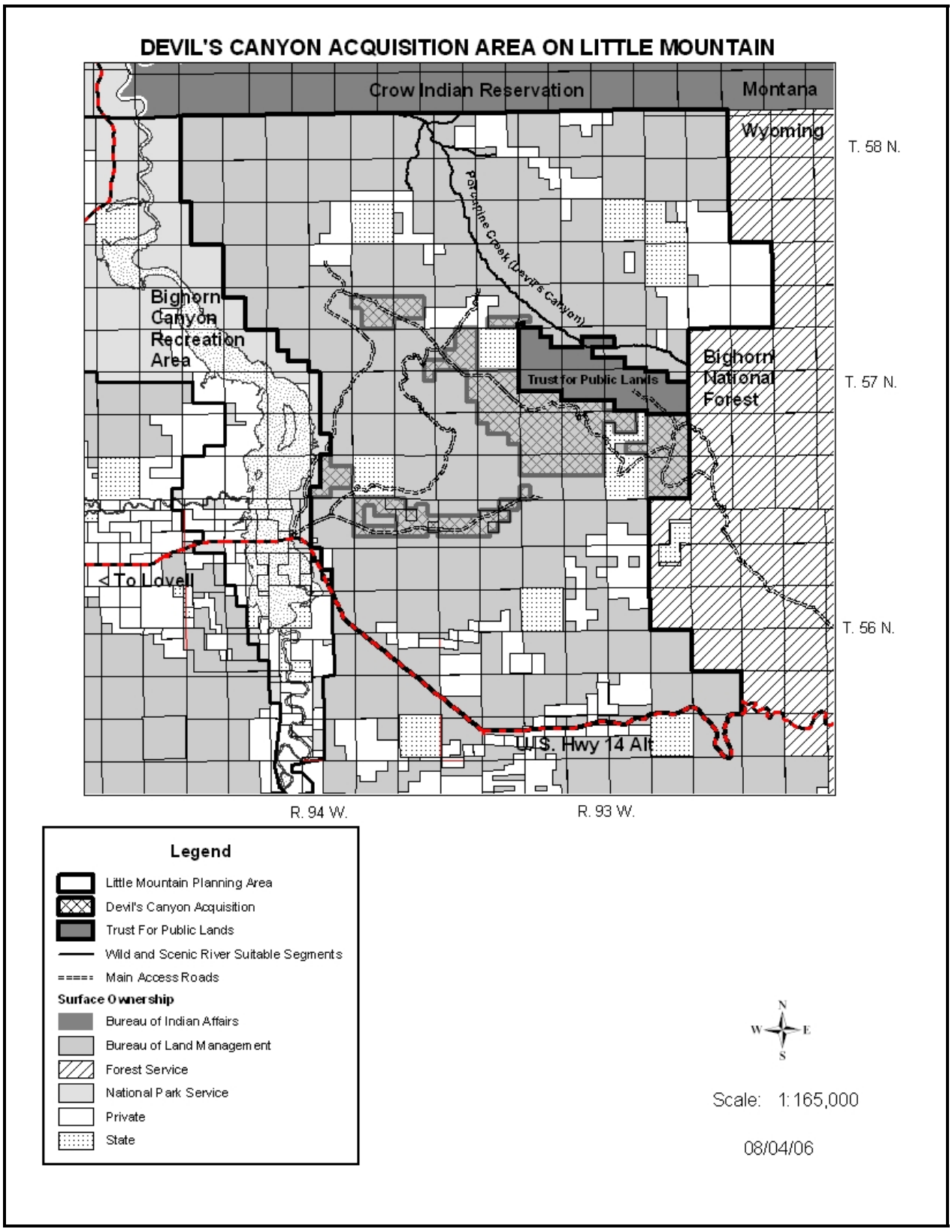
Funding for the first phase of the acquisition was provided by a $4 million congressional appropriation from the federal Land and Water Conservation Fund (LWCF) and by a donation from the Rocky Mountain Elk Foundation in the amount of $100,000. An additional 2,979 acres in the Little Mountain area are being held by The Trust for Public Land, for transfer to the BLM when funding becomes available.

The LWCF provides money to federal, state, and local governments to purchase land and water areas for conservation and recreation purposes. The fund is used to create parks and open spaces, protect and maintain the pristine nature of wilderness areas, wetlands, and refuges, preserve wildlife habitat, protect archaeological and historical sites, provide clean water, enhance scenic vistas, and provide for public recreational opportunities. Lands that are acquired with LWCF funding are not subject to operation of the public land laws and are therefore not open to mining location, or sale.

An RMP maintenance action for the Cody RMP was completed in 2005 to add the following clarification to the Lands and Realty Management Decisions, Management Actions section: "Acquired lands and/or interests in acquired lands will be managed in accordance with the Cody RMP and in a manner consistent with adjacent or nearby public lands if applicable. Acquired lands within an ACEC or other special management areas will be managed in accordance with the special management area's activity plan which supported/justified the acquisition." Based on this RMP maintenance action, the recently acquired Devils Canyon Ranch lands fall within the West Slope SRMA, but do not fall within the Little Mountain ACEC. The recently acquired lands, and any lands acquired in the future within the Little Mountain Planning area would be subject to the Little Mountain Activity Plan.

Figure 1 below, Devils Canyon Acquisition Area on Little Mountain shows the lands that were acquired by BLM, the lands currently held by the Trust for Public Lands, and the lands that remain in private ownership within the planning area.

Figure 1


DEVIL'S CANYON ACQUISITION AREA ON LITTLE MOUNTAIN
Crow Indian Reservation
Montana
Wyoming
T. 58 N.
Porcupine Creek (Devil's Canyon)
Bighorn Canyon Recreation Area
Trust for Public Lands
Bighorn National Forest
T. 57 N.
To Lovell
T. 56 N.
U.S. Hwy 14 Alt
R. 94 W.
R. 93 W.
Legend
Little Mountain Planning Area
Devil's Canyon Acquisition
Trust For Public Lands
Wild and Scenic River Suitable Segments
Main Access Roads
Surface Ownership
Bureau of Indian Affairs
Bureau of Land Management
Forest Service
National Park Service
Private
State
N
W
E
S
Scale: 1:165,000
08/04/06

3.3 Travel Management and Access

A comprehensive approach to travel management recognizes that the roads and trails on BLM managed public land serve multiple uses and help facilitate a variety of management objectives. Travel management decisions should be integrated with all BLM programs and resource use aspects (such as recreational, traditional, casual, agricultural, commercial, and educational) and accompanying modes and conditions of travel on the public lands. The roads in the planning area are used by ranchers, grazing permittees, outfitters and guides and other commercial recreation permittees, public recreationists, private landowners, and employees of Big Horn County, Wyoming Game and Fish Department, BLM and other land management agencies. Motorized vehicle access is required to access private lands and for maintenance of various rights-of-way within the planning area. Following is a list of the various rights-of-way that are located in the Little Mountain area:

- Pipeline (WYW69506), Bischoff Livestock Co., (T.56N., R.93W. Sec.17,20,29)
- Powerline (WYW79377), Pacific Power & Light (PP&L), (T.56N., R.92W. Sec.30)
- County Road (WYW79482), Big Horn County, (T.56N., R.94W. Sec.4 and T.57N., R.94W. Sec.26,34,35)
- Road (WYW123862), Trust for Public Land, (T.57N., R.94W. Sec.11,12,13,23,24) and T.57N., R.93W. Sec. 1, 2, 5, 7.
- Powerline (WYW148676), PP&L, (T.56N., R.92W. Sec.30)

As a result of the Devil's Canyon Ranch land acquisition, public access within the planning area was greatly increased. In 2004, Cottonwood Trail and Pete's Canyon Trail were closed to motorized use in response to resource concerns and visitor safety. These trails remain open to foot, and horseback travel. (Refer to section 3.13.1 for additional information about the trails).

The lands managed by the Trust for Public Lands are available to the public for recreational purposes. If funding becomes available for the second phase of the acquisition, and these lands are acquired by the BLM, they would be incorporated into this activity plan with the suggested road and trail designations.

In 1993, E.O. Bischoff Ranch granted an easement to the BLM across their private land for access to the caves in the northwest portion of the planning area and to an overlook of Deer Creek, the public is allowed to use these easement roads. Access for use by the public has not been formally granted across any of the other remaining private lands, however, the public has generally been allowed to use the roads on private land, west of Devil's Canyon in the northern portion of the planning area without restriction by the E.O. Bischoff Ranch. Public access into Devil's Canyon and on the private land in the northeast portion of the planning area has been restricted. Alternatives to allow public access into Devil's Canyon will be considered in this plan, the history of the Devil's Canyon road and gate is described in detail below.

3.3.1 Devil's Canyon Road and Gate

The BLM Cody Field Office is processing an application for a right-of-way grant that would authorize use of existing roads on Little Mountain. The E.O. Bischoff Ranch has requested a

road right-of-way across BLM administered public land for the purpose of legally accessing their private land and the Moss Ranch in the northeast portion of the planning area. There are three vehicle access routes into the Moss Ranch, one on BLM-managed public lands and private lands owned by E.O. Bischoff Ranch through Devil's Canyon, one on the Bighorn National Forest through private lands owned by E.O. Bischoff Ranch, and one from the north through Montana and Crow Indian Reservation lands. Access via the Bighorn National Forest is limited during the winter months due to seasonal closures and snow accumulation. Access via BLM is on existing roads including the John Blue Canyon Road and the Devil's Canyon Road. This route is accessible by vehicle nearly year round, due to the lower elevations and typically less snow accumulation. The E.O. Bischoff Ranch has offered a reciprocal right-of-way for administrative access across their private land to the Big Horn National Forest that would be granted to the BLM. This action is a follow up to prior coordination with the private landowners that resulted in the existing easement that provides access to Natural Trap and Horsethief Caves and to the Deer Creek overlook. A Class III cultural resources inventory has been conducted for this pending authorization and a separate environmental analysis is in progress.

A gate was constructed on the Devil's Canyon Road, on public land, by the Bischoff's in the 1960's for which no documented authorization could be found. The gate is located at the top of the canyon, just before the road begins its steep switchbacks into the canyon (T. 57 N., R. 93 W. Sec. 4 SWSW1/4). The main vehicle access to the gate involves crossing private land; alternative vehicle access across public land to the gate is limited due to road conditions (washouts, etc). There is currently no legal public access for vehicles on the main roads to access the gate; however the landowners have allowed the public to use these road segments with no restrictions. Currently the private landowners control the gate and have allowed vehicular access through the gate to BLM employees for administrative purposes, BLM permitted outfitters, and to those assisting with their grazing and ranching operations. They have also allowed some members of the public to obtain a key for vehicular access upon request, but have denied vehicular access to others. Generally, the public can go around the gate via foot to gain access to the public land.

The road was inspected in 2002 by Jim Honn, Supervisory Civil Engineer, Worland Field Office and in 2006 by Alberta Settle, Supervisory Civil Engineer, Worland Field Office to determine the status of accessibility for the public, private and BLM. The Devil's Canyon Road is characterized by extremely steep grades, sharp switchbacks, a narrow running surface, loose surfacing and a low maintenance frequency. The grades run from 20-30% in places where the road descends into the canyon. The road has a history of being washed out in recent years. The two main switchbacks are extremely tight and do not allow for regular trailer usage (ie: recreational, camper, etc.). The running surface is extremely narrow which inhibits two-way traffic. This is dangerous because the inability to pass on the steep grades creates safety hazards. The surface is loose which creates traction problems and will not be improved with the low maintenance frequency attributed to this road.

Based on assessments conducted by the BLM engineers, range, recreation, and realty staff, it has been determined that a gate in this location is appropriate. The gate is necessary to control vehicle access while moving livestock up the narrow canyon and to prevent safety hazards associated with vehicle access, as described above. Formal authorization for this gate location on

public land would be documented in a cooperative agreement through the range program. Management alternatives for public access through the gate are addressed in this environmental analysis.

3.3.2 Seasonal Closure

There are currently no seasonal closures in place on BLM-managed public lands within the planning area. Access to the eastern portion of the planning area through the Bighorn National Forest, past the Medicine Wheel National Historic Landmark on Forest Road 12 is only open to vehicles from approximately June through October, depending on snow accumulation. This effectively limits access to the eastern portion of the planning area from November through May.

A seasonal closure (December 1 – April 30) to motorized vehicles to protect big game crucial winter range on the top of Little Mountain has been proposed. The Wyoming Game and Fish Department recommended a seasonal closure from December 1 – March 31, the proposed seasonal closure date was extended to April 30 to be consistent with other seasonal closures in the BLM Cody Field Office area. Implementation of the proposed seasonal closure and potential alternatives will be considered in this environmental analysis.

3.4 Vegetation

Four major vegetation communities are identified within the Little Mountain planning area. The principle upland vegetative community in the planning area is a sagebrush/bunchgrass type. In the understory, some of the common bunchgrasses are bluebunch wheatgrass (*Pseudoroegneria spicata*), Idaho fescue (*Festuca idahoensis*), green needlegrass (*Stipa viridula*), needle and thread grass (*Hesperostipa comata*), sandberg bluegrass (*Poa secunda*), king spikefescue (*Leucopoa kingii*), and basin wildrye (*Elymus cinereus*). Also in the understory are prickly pear cactus (*Opuntia polyacantha*), sego lily (*Calochortus nuttallii*), Indian paintbrush (*Castilleja spp.*), stonecrop (*Sedum spp.*), yarrow (*Achillea millifolia*), wild onion (*Allium spp.*), death camas (*Zigadenus spp.*), buckwheat (*Erigonum spp.*), larkspur (*Delphinium spp.*), lupine (*Lupinus spp.*) arrowleaf balsamroot (*Balsamorhiza sagittata*), and rabbitbrush (*Chrysothamnus spp.*). The major shrubs and trees in the overstory include Wyoming big sagebrush (*Artemesia tridentata wyomingensis*), black sagebrush (*Artemesia nova*), mountain big sagebrush (*Artemisia tridentata vaseyana*), snowberry (*Symphoricarpos spp.*), Rocky Mountain juniper (*Juniperus scopulorum*), Utah juniper (*Juniperus osteosperma*), and limber pine (*Pinus flexilis*). Wyoming big sagebrush is found on drier sites, while mountain big sagebrush grows in areas higher in elevation with greater moisture, and black sagebrush is usually on sites with shallow soils and an abundance of limestone.

Conifer-woodland Plant Communities:

Another community is the conifer-woodland type. This community consists of Douglas fir (*Pseudotsuga menziesii*), limber pine, Engelmann spruce (*Picea Engelmannii*), lodge pole pine (*Pinus contorta*), and some quaking aspen (*Populus tremuloides*); it has an understory of grasses, currant bushes (*Ribes spp.*), bearberry (*Arctostaphylos alpina*), Oregon grape (*Mahonia repens*), snowberry, *and* various species of forbs, some of which are also present and listed in the sagebrush/bunchgrass community. These conifer communities are usually located on north and northeast facing slopes where soil moisture is often greater. Conifers are also increasingly

present in some riparian areas and on sites that historically supported more aspen stands, due to lack of fire and other sources of disturbance.

Rocky Mountain Juniper Plant Communities:

Found on the rocky slopes and ridges of Little Mountain is a juniper-shrub type community. Rocky Mountain juniper is common in these areas; Utah juniper, common juniper (*Juniperus communis*), limber pine, skunkbush sumac (*Rhus trilobata*), and wax currant (*Ribes cereum*) are also found. A lack of fire over the past century has allowed juniper to encroach into sagebrush/bunchgrass and riparian communities. Located on the limestone slopes of some of the high benches are stands of curl-leaf mountain mahogany (*Cercocarpus ledifolius*), a critical winter forage for deer and elk. Many of these mountain mahogany stands are currently old and decadent due to excessive winter grazing by wild ungulates and a lack of fire.

Riparian/wetland plant communities:

Diverse riparian/wetland plant communities are associated with the planning areas' surface water features. The species present and the relative amount of riparian/wetland vegetation associated with a given drainage, spring, or seep is influenced by the water, i.e., the amount, persistence, and chemical composition, that is available, the soils/geology, and its landscape setting (microclimate). Some water features may be able to support only herbaceous vegetation whereas others may be able to support both herbaceous and woody plants and still others may be only able to support woody plants. Some of the more common herbaceous riparian/wetland plant species found in the planning area include: Baltic rush (*Juncus balticus*), alkali bulrush (*Scirpus* maritmus), tri-square bulrush (*Scirpus pungens*), Nebraska sedge (*Carex* nebraskiensis), water sedge (*Carex* aquatilis), beaked sedge (*Carex* rostrata), spike rush (*Eleocharis palustris*), tufted hairgrass (*Deschampsia cespitosa*), Kentucky bluegrass (*Poa pratensis*), redtop (*Agrostis spp*), mint (*Mentha arvense*), monkey flower (*Mimulus spp*), elephant head (*Pedicularis groenlandica*), bluebells (*Mertensia ciliata*), false Solomon's seal (*Maianthemum stellatum*), bur avens (*Geum macrophylum*), scouring rush (*Equisetum arvense*), marsh marigold (*Caltha leptosepala*), potentilla (*Potentilla gracilis*), wild licorice (*Glycyrrhiza* lepidota), and goldenrod (*Solidago spp*). Hapeman's Sullivantia (*Sullivantia hapemanii var. hapemanii*), a sensitive plant species, has been found in association with several of the areas' riparian/wetland areas. Woody plant species commonly found in association with drainages, springs and/or seeps within the planning area consist of skunkbush sumac (*Rhus trilobata*), several species of juniper (*Juniperus spp*), plains cottonwood (*Populus deltoides*), narrowleaf cottonwood (*Populus angustifolia*), quaking aspen (*Populus tremuloides*), water birch (*Betula occidentalis*), red-osier dogwood (*Cornus sericea*), chokecherry (*Prunus virginiana*), wood's rose (*Rosa woodsii*), several species of willow (*Salix spp.*), several species of currents (*Ribes spp*), shrubby cinquefoil (*Potentilla* fruticosa), Rocky Mountain maple (*Acer glabrum*), silver buffaloberry (*Shepherdia argentea*), and boxelder (*Acer negundo*). Juniper and other conifers have become exclusively dominant on some riparian/wetland sites in response to reduced fire frequency and the season-long livestock grazing that occurred in the area historically.

Sensitive Plant Species

The Five Springs Falls ACEC was designated for the protection of existing populations and habitat for four near-endemic rare and sensitive plant species: Bighorn Fleabane *(Erigeron allocotus)*, Cary beardtongue *(Penstemon cary)*, Princes plume var. tomentosa *(Stanleya tomentosa)*, and Sullivantia *(Sullivantia hepemanii).*

Several sensitive-rare plant species may occur in the activity plan area. The plants are listed in the following table and are discussed below:

Table 4

Sensitive-Rare Plant Species That May Occur in the Assessment Area	
Common Name	Scientific Name
Bighorn Fleabane	*Erigeron allocotus*
Sheathed Musineon	*Musineon vaginatum*
Cary's Beardtongue	*Penstomon caryi*
Hairy Prince's Plume	*Stanleya tomentosa var. tomentosa*
Hapeman's Sullivantia	*Sullivantia hapemanii var. hapemanii*
Pink Agoseris	*Agoseris lackschewitzii*
Aromatic Pussytoes	*Antennaria aromatica*
Rabbit Buckwheat	*Eriogonum mancum*
Mancos Wild Buckwheat	*Eriogonum mancum*
Pink Coil-beaked Lousewort	*Pedicularis contorta* var *ctenophore*
Wooly Twinpod	*Physaria lanata*
Soft Aster	*Symphotrichum mollis*

Descriptions and the status of each sensitive and/or rare plant species that may occur within the activity plan area:

Erigeron allocotus, Musineon vaginatum, Stanleya tomentosa var. *tomentosa* and *Sullivantia hapemanii* var. *hapemanii* have been located in Cottonwood Canyon on land managed by the BLM. The rest of the species are included because the area possesses suitable habitat for the species to occur and they have been discovered in the Cottonwood Canyon area managed by the Bighorn National Forest Service and in other, similar areas in close proximity (ie. Simmons Canyon, Little Mountain, Medicine Wheel and Five Springs Campground).

Agoseris lackschewitzii is listed as a state species of potential concern (watch list) by the Wyoming Natural Diversity Database (WYNDD) and ranked G4/S3, meaning globally it is apparently secure with over 100 known populations and rare statewide (ie. 100-21 known populations in Wyoming). *A. lackschewitzi* is an endemic of wet montane and subalpine meadows at 9600-10,600feet in east-central Idaho, southwest Montana and north-central Wyoming.

Antennaria aromatica is listed as a state species of potential concern (watch list) by WYNDD and ranked G3G4/S2, meaning it is globally rare to secure (ie. 100-21 known populations worldwide) and very rare statewide (ie. 6-20 populations within the Wyoming). *A. aromatica* is a regional endemic of alpine and subalpine mountain regions in northern and western Wyoming and Montana.

Erigeron allocotus is listed as a state species of potential concern (watch list) by WYNDD and ranked G3/S2S3, meaning it is globally rare (ie. 100-21 known populations worldwide) and rare to very rare statewide (ie. 6-100 populations within Wyoming). *E. allocotus* is a regional endemic of the Bighorn and Pryor Mountains of Wyoming and Montana. It occurs on xeric, calcareous, rocky sites, such as cliff faces, talus slopes and rock outcrops in juniper/mountain mahogany/sagebrush vegetation with little cover. In Cottonwood Canyon a significant population is located on the old quarry site at the western end of the canyon.

Eriogonum brevicaule var. *canum* is listed as a state species of potential concern (watch list) by WYNDD and ranked G3/S2, meaning it is globally rare (ie. 100-21 known populations worldwide) and very rare statewide (i. e., 6-20 populations in Wyoming). *E. brevicaule* is endemic to southern Montana and north-central Wyoming in the Pryor and BigHorn Mountain ranges. It inhabits barren sandy or clay soils and rock outcrops in juniper woodlands and sagebrush steppe communities, at elevations of 3800-5500 ft.

Musineon vaginatum is listed as a state species of concern (medium priority) by WYNDD and ranked G3/S2, meaning it is globally rare (ie. 100-21 known populations worldwide) and rare statewide (ie. 6-20 populations within Wyoming). *M. vaginatum* is a regional endemic of south-central Montana and north-central Wyoming (Bighorn Mts.). It inhabits rocky slopes, aspen groves, meadows and Ponderosa pine communities, in Wyoming mostly on Chugwater redbed shale or calcareous rock outcrops at elevations of 4600-8300 feet.

Eriogonum mancum is listed as a state species of concern (medium priority) by WYNDD and ranked G4/S1, meaning it is globally secure with over 100 known populations and extremely rare statewide (ie. 2 populations in Wyoming). It is a regional endemic of southwestern Montana, east-central Idaho and north-central Wyoming (Big Horn Basin and foothills of Bighorn Mountains). *E. mancum* inhabits sagebrush flats, grassy hillsides and shaley ridges, often on calcareous soils at elevations of 5600-6150 feet.

Pedicularis contorta var *ctenophora* is listed as a state species of concern (medium priority) by WYNDD and ranked G5T3/S2, meaning globally the species is secure with over 100 populations, the variety is rare (ie. 100-21 populations worldwide) and statewide the species is very rare (ie. 4 populations in Wyoming). *P. contorta* is an endemic of southwest Montana and north central Wyoming (Bighorn Mts.). It occurs in montane/subalpine sagebrush grasslands, meadows and clearings in conifer forests, often on calcareous or granitic substrates at 7,400-10,080 feet.

Penstemon caryi is listed as a state species of potential concern (watch list) by WYNDD and ranked G3/S3, meaning it is rare globally and statewide with 100-21 known populations. It is an endemic of south-central Montana and north-central Wyoming in the Pryor and Bighorn

Mountains. *P. caryi* occupies calcareous rock outcrops and rocky soil within sagebrush, juniper and mountain mahogany communities at elevations of 5200-8500 feet.

Physaria lanata is listed as a state species of concern (medium priority) by WYNDD and ranked G5T2/S2, meaning globally the species is secure with over 100 populations, the variety is very rare (ie. 6-20 populations worldwide) and statewide the species is very rare (ie. 14 populations in Wyoming). It is an endemic of north-central Wyoming (Bighorn Mts.) and adjacent Montana. *P. lanata* occurs on redbed clay-shale slopes, limestone/sandstone outcrops, road cuts and other exposed rock-cliff substrates at 4600-9500 feet.

Stanleya tomentosa var *tomentosa* is listed as a state species of potential concern (watch list) by WYNDD and ranked G4T3/S2, meaning the globally the species is secure with over 100 populations and the variety is rare (ie. 100-21 populations worldwide), statewide the species is very rare (ie. 6-20 populations in Wyoming). *S. tomentosa* is an endemic of north-central Wyoming and south-central Montana. It inhabits rocky outcrops within sagebrush, juniper, and mountain mahogany communities of low mountains to desert hills and is an indicator of the presence of selenium in soil.

Sullivantia hapemanii var hapemanii is listed as a state species of potential concern (watch list) by WYNDD, USFS R2 Sensitive Species and ranked G3/S3, meaning it is rare globally and statewide with 100-21 known populations. It is an endemic of south-central Montana, central Idaho and north-central Wyoming (Bighorn Mts.). *S. hapemanii* occupies moist, calcareous outcrops and talus in mostly shady (often north facing) canyons and streams at elevations of 4600-8200 feet. In Cottonwood Canyon almost every north-facing slope that has a seep is colonized by *S. hapemanii*.

Symphotrichum mollis is listed as a state species of potential concern (watch list) by WYNDD, USFS R2/4 Sensitive Species and ranked G3/S3, meaning it is rare globally and statewide with 100-21 known populations. It is an endemic of the Bighorn Mts. and Hoback Canyon in Wyoming. *S. mollis* occurs in sagebrush grasslands and mountain meadows on calcareous soils at the edge of aspen or pine woodlands at elevations of 6400-8500 feet.

Bighorn Fleabane (*Erigeron allocotus*), Sheathed Musineon (*Musineon vaginatum*), Hairy Prince's Plume (*Stnleya tomentosa var. tomentosa*), and Hapeman's Sullivantia (*Sullivantia hapemanii var. hapemanii*) have been located in Cottonwood Canyon. *Sullivantia hapemanii var. hapemanii* has also been observed on Cow Creek which is a tributary of Porcupine Creek.

Data Source: Cottonwood Canyon Special Status Plant Inventory and Report, Katie Vinzandt, 2002 and personal observations by Jerry Jech.

3.4.1 Weeds

The riparian zones along Porcupine Creek and Deer Creek have some low density infestations of weeds. Identified weed species include Houndstongue (*Cynoglossum officinale L.*), Canada thistle (*Cirsium arvense L.*), and Hoary Cress (Whitetop *Cardaria draba L. Desv.*). Russian knapweed (*Centaurea repens L.*) has been observed near the mouth of Pete's Canyon, the low end of John Blue Canyon, and occurs in the northwest part of the planning area along roads, in

depressions, around reservoirs, and on other disturbed sites. The following weeds and undesirable plant species were described in the watershed assessment plan: Russian knapweed, whitetop, Canada thistle, salt cedar (*Tamarix chinensis*), musk thistle (*Carduus natans L*), houndtongue, cheatgrass (*Bromus tectorum*), and Russian olive (*Elaeagnus angustifolia*). Some of the weeds were likely introduced by livestock, wildlife, in hay, or by vehicles, people, or their pets. Herbicide treatments to control and reduce weed infestations are conducted by BLM in cooperation with the Big Horn County Weed and Pest District.

Although most of the Little Mountain area does not have major infestations of noxious weeds, many small areas that have had some type of past disturbance have some degree of weed presence. These sites include roadways, ponds and reservoirs, water tanks, salting locations, and areas where prescribed burn vegetation treatments have been conducted. In general, weed infestations are primarily in areas where past ground disturbance has occurred. The spread of weeds has not been prolific and most of the native rangelands are free of noxious weeds and retain native vegetation communities that are resistant to weed spread. However, because there are several different noxious weeds present in the management area, any new disturbances pose a risk for weed spread. On going weed treatment programs have reduced weed density in many locations and have helped keep weed spread in check. Due to the competitive nature of noxious weeds, it is very unlikely that weeds can be eradicated from the Little Mountain management area. But with continued integrated treatment methods combined with a good information and education effort, weed infestations may be held to a manageable level that will not have a major impact on other resources. The information and education effort will need to be integrated into the activity plan adopted for this area.

3.5 Soils

The Cody RMP ORV decision “vehicle use limited to designated roads and trails” applies to areas with fragile soils, Class I or II Visual Resource Management (VRM) ratings, and areas with significant cultural and paleontological resources (RMP/ROD p. 22). Soils in the Cody Field Office area are discussed in detail in the Cody RMP Draft EIS. Fragile soils are characterized by, “their shallowness, steep slopes, high erodibility, susceptibility to compaction and crusting, and low reclamation potential” (RMP/Draft EIS p. 178).

3.6 Water

The planning area is situated in the Bighorn River basin and contains parts of nine distinct watersheds. The watersheds, the number of acres of each within the planning area and the total miles of drainages are shown in the table below.

Table 5

Watershed	Acres in the Planning Area	Total Drainage Miles (NHD)
Lower Porcupine Creek	6,030	30
Middle Porcupine Creek	12,392	44
Upper Porcupine	3,814	10

Trout Creek	5,821	22
Deer Creek	10,571	31
Willow Creek	22,272	129
Five Springs Creek	4,656	23
Crystal Creek	105	0.3
John Blue Canyon	23,670	116
Total Acres in Planning Area	89,331	405.3

These watersheds contain at least 19 major drainages including: Porcupine Creek, Trout Creek, Five Springs Creek, Sheep Creek, Deer Creek, North Fork Trout Creek, Willow Creek, Cottonwood Creek, Simmons Canyon, Pete's Canyon, Vopats Canyon, John Blue Canyon, Cow Creek, Spring Creek, Oasis Spring Creek, Hannan's Coulee, Hayes Spring Creek, Brown's Spring Creek, and Elk Springs Creek. Most of these drainages have sections that run water year round and several including Porcupine Creek, Trout Creek, Five Springs Creek, and Sheep Creek are perennial within the planning area. Perennial springs and seeps are also fairly common in the area.

Several species of trout, i.e., rainbow trout (*Oncorhynchus mykiss*), brown trout (Salmo t*rutta*), and Yellowstone River cutthroat trout (*Oncorhynchus clarki bouvieri*) and other non-game fish species inhabit the perennial sections of Porcupine Creek, Trout Creek, and Deer Creek. Wyoming Game and Fish Department fisheries personnel documented the presence of brook trout in the upper parts of Willow Creek in the late 1970's.

The Porcupine Creek Watershed Assessment was written in 2004. It contains information about various resources present in the area, impacts to resources, and suggestions for improvement.

Livestock grazing allotments and standards and guideline evaluations were described. Different allotments passed or failed various standards. Factors related to grazing that can be manipulated include: utilization level, season of use/timing, growing season use, trampling, trailing, and duration of use. Surface disturbance from roads, trails, livestock grazing, mining, and other activities which occurred in the past or are now occurring all can impact watershed health. Over time there has been an increase in the number of roads and trails in the area.

A plan entitled "Basin Management Plan – Porcupine Creek and Tributaries" written in 2004 by the Wyoming Game and Fish Department mentioned several limiting factors for fish habitat in Deer and Trout Creeks which included: sedimentation impacts from cattle grazing and road crossings on Deer and Trout Creeks off the National Forest, and irrigation diversions, which dewater sections of Deer and Trout Creeks.

Many of the aquatic systems in the assessment area have been assessed to determine their functional status. The systems that support game fish populations in the assessment area are properly functioning or are almost properly functioning with an upward trend and are providing good game fish habitat. Some habitat parameters could be better, i.e., the WG&FD documented flows are reduced due to irrigation diversions and some roads and trails increase runoff and sediment delivery to the streams. Management changes have been and are being implemented that have begun improving watershed and ecological function in this area.

Grazing management changes implemented in the past 5-10 years have resulted in significant improvement on most riparian and wetland areas. But improvement is slight or occurring very slowly on many of the seeps and springs that are accessible to large herbivores. This is due to both livestock and wildlife grazing.

Suggestions for improvement in watershed health include the following items: Design any new roads properly taking into account soils, topography, and other resources, maintain existing roads adequately, include water bars where needed, close unneeded roads and rehabilitate them, use Best Management Practices for facilities and activities, improve water management for all surface disturbing activities, continue sagebrush/juniper control efforts, and treat weeds. Suggestions related to livestock grazing include: follow AMPs and stipulations, improve distribution, fence where needed to better manage grazing use, install water pipelines, develop and fence springs and seeps, discourage trailing along fence lines, increase monitoring efforts, and continue to improve grazing rotations using adaptive management.

Improvements to watershed health have occurred due to the following actions which have been implemented over the last few years: changes in grazing management, development and fencing of springs, installation of water pipelines, and prescribed burning to increase herbaceous ground cover.

3.7 Visual Resource Management

The Cody RMP included a decision that visual resources in the planning area will be managed under a Class I, Class II, Class III, or Class IV designation. Visual Resource Management (VRM) management classes determine the amount of modification allowed to the basic elements of the landscape. In a Class I area, very limited management activity is allowed. Created contrasts must not attract attention. In a Class II area, changes in any of the basic elements caused by management activity should not be evident in the characteristic landscape. Contrasts are seen but must not attract attention. In a Class III area, contrasts to the basic elements caused by a management activity are evident but should remain subordinate to the existing landscape. In a Class IV area, any contrast attracts attention and is a dominant feature of the landscape in terms of scale, but it should repeat the form, line, color, and texture of the characteristic landscape. (RMP/ROD Appendix H. p. 99). Visual resources are discussed in detail in the Cody RMP Draft EIS on page 197. The planning area contains Class II and Class III areas with the Five Springs Falls ACEC managed as a Class I area.

3.8 Wildlife

Wildlife species that inhabit the area include a wide variety of large and small mammals, game birds, raptors, and migratory birds. Several species such as elk (*Cervus elaphus*), mule deer (*Odocoileus hemionus*), pronghorn (*Antilocapra americana*), bighorn sheep (*Ovis canadensis*), black bear (*Ursus americanus*), mountain lion (*Puma concolor*), whitetail deer (*Odocoileus virginianus*), and game birds like ring-necked pheasant (*Phasianus colchicus*), ruffed grouse (*Bonasa umbellus*), chukar (*Alectoris chukar*) and gray partridge (*Perdix perdix*) are important economically in providing numerous opportunities for hunting and other recreation. These and other nongame species also provide wildlife viewing and aesthetic values for the public. Raptors

found in the general area include red-tailed hawks (*Buteo jamaicensis*), golden eagles (*Aquila chrysaetos*), prairie falcons (*Falco mexicanus*), American kestrels (*Falco sparverius*), and peregrine falcons (*Falco peregrinus*).

The project area contains crucial winter range for mule deer and elk. The area northeast of Devil's Canyon is yearlong and crucial winter range for Bighorn sheep. Large groups of elk use the eastern portion of the Moss Ranch Allotment extensively during spring and fall migrations. Moose are also present in the planning area (a large bull was seen on the middle section of Cow Creek in the summer of 2004). Golden eagles, prairie falcons, peregrine falcons and several hawk species may nest within the Little Mountain area and golden eagles are known to winter in the area. Several greater sage-grouse (*Centrocercus urophasianus*) leks have been identified within the planning area and the area provides year around habitat for sage grouse. Blue grouse (*Dendragapus obscurus*) are common at higher elevations near forested habitat.

The streams in the planning area (Porcupine, Deer, and Trout Creek) comprise a significant percentage of the cold water fishery administered by the BLM Cody Field Office. Yellowstone River Cutthroat Trout (*Oncorhynchus clarki*), a BLM sensitive species for Wyoming are present in Deer Creek. These streams provide excellent quality habitat for brown (*Salmo trutta*), rainbow (*Oncorhynchus mykiss*) and brook trout (*Salvelinus fontinalis*) as well and because of the natural protection of the canyon walls, negative impacts directly related to human activity has remained low. Water diverted for irrigation has dewatered the lower two - three miles of Deer Creek.

3.8.1Special Status Species

The canyon corridors provide important nesting, roosting and foraging habitat for several BLM Wyoming Sensitive Species including: peregrine falcon, Townsend's big-eared bat (*Corynorhinus townsendii*), spotted bat (*Euderma maculatum*), long-eared myotis (*Myotis evotis*), and fringed myotis (*Myotis thysanodes*). Sagebrush grasslands also provide habitat for Sensitive migratory bird species including: sage thrasher (*Oreoscoptes montanus*), loggerhead shrike (*Lanius ludovicianus*), long-billed curlew (*Numenius americanus*), sage sparrow (*Amphispiza belli*), Brewer's sparrow (*Spizella breweri*), Baird's sparrow (*Ammodramus bairdii*) and greater sage-grouse. Caves and mines within the planning area also provide a unique and important habitat for a variety of bat species. These sites are critical for bats as hibernacula and maternity roosts. Bats are known to inhabit Horsethief, Natural Trap, and Bighorn caves. There likely are several other unknown cave or rock shelter bat roosts in the Little Mountain area. The perennial section of Deer Creek supports a self-sustaining population of Yellowstone River cutthroat trout (per Steve Yekel, WG&FD Fish Biologist), which is a BLM sensitive species. At the current time, there are no known occupied habitats for any Threatened, Endangered or Proposed/Candidate wildlife or plant species in the Little Mountain planning area. Bald eagles (*Haliaeetus leucocephalus*) may occasionally pass through the area but would generally stay at lower elevations along the Bighorn River and in Bighorn Canyon National Recreation Area. Gray wolves (*Canis lupus*) have been sighted in the Bighorn National Forest in recent years and are likely migrant individuals that have moved from the Greater Yellowstone experimental population of wolves. However, wolves have not been observed or tracked in the planning area. Canada lynx (*Lynx Canadensis*) could be present in the Bighorn National Forest but there is generally very limited suitable habitat for lynx and snowshoe hares on BLM lands in the Little

Mountain area. There have been no recorded observations of lynx in the planning area. There have been isolated reports of grizzly bears (*Ursus arctos*) in the Bighorn Mountains, but no verified observations. The Little Mountain planning area is outside of the proposed recovery and conservation occupancy areas identified in the Wyoming grizzly bear management plan, so grizzly bears would not be expected to occupy suitable habitat in this part of Wyoming in the future.

3.9 Range

There are twelve livestock grazing allotments within the Little Mountain planning area. Eleven of the allotments lie entirely within the planning area while one large allotment lies mainly outside the area but does have a trailing pasture along Highway Alt. 14 within the planning area. Nine of the allotments have Allotment Management Plans (AMPs) in place (written in 1994 and 1997). These plans describe how grazing will be conducted and include actions related to facility construction and maintenance, monitoring, prescribed burns, forage use levels, seasonal rotation schedules, salt placement, herding, fencing, protection of riparian areas, trailing, development of additional water sources such as protection of springs and seeps and water pipeline and trough placement. The amount of allowable grazing is also included in the plans.

Wyoming Rangeland Standards Conformance Reviews (commonly called Standards and Guidelines or S&Gs) have been conducted on eleven of the allotments during the years 2000 to 2004.

There are six standards which are evaluated. They include:

Standard #1: Within the potential of the ecological site, soils are stable and allow for water infiltration to provide for optimal plant growth and minimal surface runoff.

Standard #2: Riparian and wetland vegetation has structural, age, and species diversity characteristic of the stage of channel succession and is resilient and capable of recovering from natural and human disturbance in order to provide forage and cover, capture sediment, dissipate energy, and provide for groundwater recharge.

Standard #3: Upland vegetation on each ecological site consists of plant communities appropriate to the site, which are resilient, diverse, and able to recover from natural and human disturbance.

Standard #4: Rangelands are capable of sustaining viable populations and a diversity of native plant and animal species appropriate to the habitat. Habitats that support or could support threatened species, endangered species, species of special concern, or sensitive species will be maintained or enhanced.

Standard #5: Water quality meets State standards.

Standard #6: Air quality meets State standards.

Livestock grazing allotments are evaluated by an interdisciplinary team to ascertain the relative health of the rangeland. Standards are the benchmarks that are used to compare present resource

conditions in the allotment to help determine rangeland health. The S&G document contains a section where factors related to non-conformance with standards can be described. Factors such as mining, recreation, other surface uses, as well as grazing by livestock and wildlife may affect the area's ability to meet standards. The following table summarizes the S&G status by allotment and year:

Table 6

AMP and S&G Completion Table

Allotment Name	Allotment Number	Year AMP Completed	Year S & G Completed	Standard					
				1	2	3	4	5	6
Mexican Hills	01010	1997	2000	Y	N	N	Y	U	Y
Many Springs	01024	1997	2001	N	N	N	N	U	Y
Burnham	01026	1994	2001	Y	N	Y	Y	U	Y
Moss Ranch	01027	1994	2002	Y	Y	Y	Y	U	Y
Little Mountain	01028	1997	2001	N	N	N	N	U	Y
Moncur Springs	01029	1997	2001	N	N	N	N	U	Y
Lovell Group 1	01032	no	2004	N	N	N	N	U	Y
One Forty	01033	1997	2001	N	N	N	N	U	Y
Willow Creek	01034	no	2004	Y	Y	Y	Y	U	Y
Natural Trap	01089	1994	2001	Y	N	Y	Y	U	Y
Low Miller	01090	1997	2000	Y	N	N	Y	U	Y
Kane Stock Trail	01405	no	no	U	U	U	U	U	U

[1] Codes in Standard columns are as follows: Y=Yes meets standard, N=No does not meet standard, U= Unknown

[2] Standards 5 and 6 are dependent upon determinations made by the Wyoming Department of Environmental Quality (DEQ). Standard 5 is Unknown if allotment specific data is not available. DEQ has not identified air quality impairments within the Cody Field Office resulting in Standard 6 being met.

The S&G document contains a section which lists selected guidelines to implement changes in grazing management and a section which identifies specific actions including permit/lease terms and conditions. The last section of the S&G document is the Authorized Officer's Determination. In this section, the Authorized Officer for BLM determines what corrective actions will be taken to help the area meet standards. This may include corrective actions for other activities in addition to grazing management.

Corrective actions include the following types of actions: establishing deferred rotational strategies which allow some rest during the active growing season, establishing forage use levels, fencing, monitoring, development or maintenance of water sources for better livestock distribution, prescribed burning of juniper and/or sagebrush to increase plant diversity and vigor, protection of riparian areas including fencing of springs and seeps, treatment of weeds, and reductions in Active Preference. Many of these actions have been taken and improvements in resource condition in several of the allotments are evident.

3.10 Geology & Minerals

The project area contains no less than nine geologic formations. These formations are all exposed on the uplifted and folded western flank of the Bighorn Mountains, which formed during the Late Cretaceous-Eocene Laramide Orogeny. West of the mouth of John Blue Canyon are the characteristic red siltstone and shale cliffs of the Triassic Chugwater Formation. These are the youngest rocks in the area at approximately 220 million years old. Older strata from west to east include the Permian Goose Egg Formation, Pennsylvanian Tensleep Sandstone, Mississippian-Pennsylvanian Amsden Formation, and Mississippian Madison Limestone. These formations are prolific sources of chert (cryptocrystalline quartz). The bulk of the project area lies upon outcrops of these strata. East of Devil's Canyon, many of the same formations, as well as Cambrian, Ordovician and Devonian-aged strata, are seen in outcrop.

Caves and Karst

The planning area contains limestone karst terrain, a unique landform with geomorphic features characterized by caves, sinkholes, lineaments, disappearing streams, and springs. These features often provide point sources for aquifer recharge in the region. Lineaments are linear or curvilinear surface features that indicate joints or fractures at depth which are exposed at the land surface. These features are often found in association with caves. Sinkholes and cave entrances naturally collect water, and can accumulate richer organic materials and soils. This, in conjunction with a more stable microclimate near a cave entrance, supports a greater diversity and density of plant materials, which provides habitat for a greater diversity and density of wildlife.

The BLM Cody Field Office manages several significant cave resources within the planning area, as identified in the Federal Cave Resources Protection Act of 1988. Significant caves may contain valuable cultural, paleontologic, hydrologic, scientific and educational resources, and provide unique recreational opportunities.

Horsethief Cave, located in the Bighorn Mountains, got its name from horse thieves who used the cave entrance and surrounding areas years ago. The cave was known for many years but was thought to be insignificant in size compared to the neighboring Bighorn Caverns that was discovered in 1961. In 1970 Denise's Crystal Crawl was discovered in Horsethief Cave, leading to the discovery and subsequent mapping of additional passages. The Horsethief / Bighorn cave system is one of the most extensive cave systems known to date west of the Black Hills. The surveyed length of the combined cave system is approximately 12 miles. Horsethief cave is a horizontal maze cave in the Mississippian age Madison Limestone formation, the cave depth is 189 feet. The cave contains large breakdown rooms and tight crawlways. Typical cave formations in Horsethief include flowstone, gypsum flowers, calcite crystals, angel hair, and helectites.

Cave formations called speleothems, form from water depositing minerals in the cave. Stalagmites are upward-growing, and stalagtites are downward-growing calcite cones precipitated from water dripping into caves from above. Draperies, sometimes called "cave bacon", form when calcite-rich solutions flow along overhanging surfaces. When water flows down the walls and over the floors, flowstone forms. The rich red, brown, and orange colors are a result of plant acids, iron oxide, or bacteria entering the cave via water from the surface.

The primary values of the cave that have been identified include highly decorated passages, wild cave conditions, and opportunities for surveying, mapping, and recreational caving. Archaeological and Paleontological values are present in some areas within and surrounding the cave. Horsethief was gated in 1972 to protect the fragile and non-renewable cave resources and maintain opportunities for a wild cave experience.

Another very important storehouse of archaeological and paleontological information found near Horsethief cave is Natural Trap Cave. This 80-foot bell shaped karst sink hole served as a "natural trap" for unsuspecting animals that fell into the pit. Pleistocene fauna discoveries within the cave include the short faced bear, dire wolf, American lion, American cheetah, mammoth, four types of extinct horse, American camel, woodland musk ox, fossil bison, and extinct bighorn sheep. The cave was gated in 1973. In 1991 a Federal Register Notice was issued to close Natural Trap Cave to all uses except scientific. This action was taken to protect world class paleontological resources within the cave which include examples of fauna and other scientific data from about 250,000 years before present.

In addition to the caves that are gated and actively managed for recreational and scientific purposes, there are many other known cave resources within the Little Mountain planning area, and the potential for additional cave discoveries in the planning area is high.

Mineral Resources

Only three locatable mineral resources are known from the Little Mountain planning area, none of which is available in commercial quantities. These minerals include:

(1) Uranium (U_3O_8 and tyuyamunite) - found only in the uppermost Madison Limestone;
(2) Silica sand (SiO_2) - found only in thin (0-20' thick) outcrops of Tensleep Sandstone along the west flank of Little Mountain; and
(3) Gypsum ($CaSO_4$) - thin outcrops of gypsum occur sporadically wherever the Permian Phosphoria or Goose Egg Formation and/or Jurassic Gypsum Spring Formation occur.

Leasable minerals such as oil and gas, coal, phosphates, sodium or potassium evaporite minerals, or geothermal resources, are not known to occur on or below the Little Mountain planning area.

Deposits of salable minerals (sand and gravel, flagstone, "moss rock", scoria, pumice) other than bedded limestone and dolomite, are not found within the Little Mountain planning area. Limestone bedrock in the area is generally overlain by poorly developed rocky soils.

Mineral Withdrawals

Withdrawals that close the area to operation of the public land laws, including mineral location (mining claims) have been completed on about 528 acres over Horsethief and Natural Trap caves. The mineral withdrawal locations are shown on the Little Mountain Planning Area Maps 1 and 2.

Many of the roads in the planning area were created to facilitate uranium mining activities in the 1950's. The planning area contains abandoned uranium mines, prospects, and tailings as well as valid mining claims and associated facilities. High radon levels and open pits associated with uranium mines pose an environmental hazard to visitors traveling in the northwest portion of the

planning area. In 1991, a Federal Register Notice was issued closing the areas around Lisbon (aka Dirty Beast) Mine and Titan Mine to casual use to protect public health and safety. All access roads leading to these areas were also closed to casual use by this Federal Register Notice. The areas closed to casual use are shown on the Little Mountain Planning Area Maps 1 and 2.

There are existing Classification and Multiple Use (C&MU) segregations from locatable mineral exploration and development on about 3,277 acres within the Little Mountain ACEC. These areas are closed to new mining claims.

3.11 Cultural & Paleontological Resources

It is widely accepted by the professional archaeological community that the Little Mountain and upper Big Horn Canyon areas are exceptionally rich with cultural resources that span all time and cultural periods of the prehistoric past known to exist in the Northern Plains and Wyoming. In addition there are indications that earlier time periods of human occupation may be present. In addition the area was claimed and or traversed by a host of ethnographically known Native American tribes including but not limited to the Sioux, Nez Perce, Crow, Apache, Comanche, Blackfoot, Blood, Arapaho, Shoshone, Bannock, and Northern Cheyenne.

The area is also known to have been traversed and occupied by a variety of Historic peoples including the Mountain men, military, traders, Homesteaders, miners, timber cutters, farmers and ranchers.

In the past the area abounded in wildlife fully exploited by the prehistoric inhabitants. Past animal and vegetative communities for the entire period of the Pleistocene and Holocene to the present are encapsulated in deposits from Natural Trap and other caves.

Little Mountain abounds in caves and rock shelters often utilized by Historic and prehistoric people. Past environmental data is also abundant. Indications are that the Little Mountain area contains cultural materials representing the entire known range of human occupation in the Plains.

The area contains an extensive and important environmental and Pleistocen/Holocene paleontological record as evidenced by several locations. These include Natural Trap Cave and other caves.

Historic sites are limited in variety and include: Cabins, Homesteads, Trash scatters, Roads and Trails, Mines, and the M.L. Ranch which is listed in the National Register of Historic Places. There are several types of cabins in need of assessment. There are ranching associated cabins dating from the early 1900’s and other cabins associated with earlier periods. Many remain standing. There are approximately 35-40 known cabins.

There are several known trails that were used by Native American tribes within the planning area including the Sioux, Middle, Burnt, and Deer Creek trails.

There are concerns about illegal collection of artifacts (both prehistoric and Historic), cave vandalism, illegal digging in prehistoric and Historic sites (aka Pot Hunting), recreational

activities, livestock operations, construction, and other activities contributing to the degradation of the resource on the Public Lands.

3.12 Wilderness Characteristics

The wilderness inventory of BLM lands in Wyoming began in November 1978, subject to the two-phase inventory process of initial inventory and intensive inventory. The wilderness inventory was conducted pursuant to Section 603 of the Federal Lands Policy and Management Act (FLPMA) of 1976. The Little Mountain planning area was considered during the first phase of initial wilderness inventory. These lands were determined not to contain the wilderness qualities necessary (as set forth in Section 2(c) of the Wilderness Act of 1964) for consideration during the second phase of intensive wilderness inventory and were dropped from the wilderness review process.

The three inventory units within the Little Mountain planning area were found to be divided by improved and maintained roads, private property, fences, drill holes, mining claims, and primitive roads; no 5,000 acre roadless tracts were identified. A description of inventory unit 351 indicates that *"Portions of Devils Canyon have outstanding natural character into segments of about 1,000 acres. Some protective designations such as ACEC should be considered for those canyon segments."* Those lands are within the Little Mountian ACEC and some of the river segments in this area were found suitable for inclusion in the Wild and Scenic Rivers System (See section 3.14.5).

The former Devil's Canyon Ranch lands in T. 57 N., R. 92-94 W. as shown in Figure 1, Devil's Canyon Acquisition Area on Little Mountain, above, were not considered during the initial wilderness inventory because they were private lands during the wilderness review process and BLM did not have jurisdiction to include them in the inventory. Current BLM policy specifies that additional wilderness inventory is not required. Following settlement of a lawsuit (Utah v. Norton, April 2003), the authority of BLM to conduct wilderness reviews, including the establishment of new WSAs, expired no later than October 21, 1993 with submission of the wilderness suitability recommendations to Congress pursuant to Section 603 of FLPMA. BLM will not establish, manage or otherwise treat public lands, as WSAs or as wilderness pursuant to Section 202 of FLPMA. Consistent with the settlement, the BLM rescinded the Wilderness Inventory and Study Procedures Handbook (H-1630-1, per IM. No. 2003-195 dated June 20, 2003). BLM will only manage or otherwise treat public lands as WSAs and congressionally designated wilderness as established under Section 603 of FLPMA (refer to Washington Office IM. No. 2003-275 Change 1). Although BLM has retained its authority under Section 201 of FLPMA to inventory public land resources and other values, including characteristics associated with the concept of wilderness (size, naturalness, solitude and/or primitive and unconfined recreation, and special values), and to consider such information during land use planning, BLM is not required to conduct additional wilderness inventory.

3.13 Recreation

The Little Mountain area is popular with the communities of Lovell, Powell, Sheridan and Billings for a wide variety of recreational activities. Popular activities include hiking, horseback riding, ATV driving, mountain biking, caving, hunting, fishing, rock hounding, photography and

study of the area archeology and history. The public and commercial outfitters use the area for big game, small game and bird hunting. In addition to the general public, there are Special Recreation Permits (SRPs) that authorize commercial guided recreational activities in the planning area.

Use of motorized vehicles in the area has occurred since the 1940s, mainly associated with uranium mining and exploration, livestock grazing and hunting. With the advent of four-wheel drive vehicles, more use has been made of the area for recreational driving and sightseeing. ATVs were first used in the area in the late 1970s and early 1980s and are becoming more popular for off-highway driving. In the 1990s hill climbing and recreational off-road driving began to create new routes. Advancements in vehicle technology have allowed increasing motorized access to previously inaccessible areas. OHV recreation is becoming more popular and this trend is expected to continue as the population and tourism within the Cody Field Office area continue to increase. There may be an increased interest in OHV recreation due to the new Wyoming State ORV sticker program, and the associated maps and public outreach efforts.

There are currently 10 SRPs that authorize commercial guided hunting and fishing activities, or other recreational activities within the planning area. There is currently one authorized base camp in the planning area. The National Outdoor Leadership School holds a permit out of the Lander BLM office that authorizes them to conduct educational trips into Horsethief Cave. Additional applications for similar commercial recreation activities and outfitter base camps are expected in the future.

3.13.1 Developed Recreation Sites

Five Springs Falls Campground

The Five Springs Falls campground contains 19 campsites and is a Recreation Fee Site. The camping fee is $7.00 per site per night. There is no day use fee. BLM has sought funds to have the main access road and internal campground roads maintained and it is hoped that work will begin in the summer of 2006. Future plans for the campground include placement of additional picnic tables, improving informational and directional signing, development and installation of interpretive signs, inventory and marking a trail system so visitors know where they can hike while avoiding impacts to rare/sensitive plants, and continuing to solicit volunteer campground hosts.

Cottonwood Trailhead

The Cottonwood Creek Trailhead and Associated Trails Project Plan/EA was signed in 2004. A decision was made to construct a trailhead, with camping facilities, at the mouth of Cottonwood Canyon; to manage the existing Cottonwood Creek and Petes Canyon trails for nonmotorized use; to construct a nonmotorized connector trail between Petes Canyon and Cottonwood Canyon; to not pursue a trail in Simmons Canyon; and to not pursue construction of the old Hayes Trail at this time. The old Hayes Trail is shown on topographic maps but portions of it can no longer be found on the ground. People have pioneered a route up steep terrain and through fragile soils. The trail then consists of game trails up steep terrain. There are resource and safety concerns with pursuing construction of this trail. More analysis is needed before a decision could be made on whether to dedicate resources to a trail in this location.

Construction of the Cottonwood Creek Trailhead is underway. Current facilities include: toilet, livestock water trough and pipeline, large parking lot, corral pad, portions of the internal road system, and vehicle parking pads for three camp sites. Additional work remaining includes: hauling and placing additional fill and gravel; completing the camp site pads and installing the fire rings and picnic tables; welding and installing the corrals; installation of fencing, cattleguards, kiosks, signing, and completion of the internal road system. An additional two or three camp sites are also planned. Big Horn County and Shoshone Back Country Horsemen have provided valuable contributions towards development of the trailhead.

Cottonwood Canyon has steep, vertical cliffs and is very scenic. At the mouth of the canyon the elevation varies from 4,800' near the creek to 7,200' at the top of the canyon wall. The canyon contains a variety of riparian vegetation.

The trail travels about 4 miles through BLM-managed public land, then ½ mile through Bighorn National Forest land, then ½ mile through State of Wyoming land, and then back onto the national forest. Trail maintenance on the BLM and FS portions was conducted by a crew from the Montana Conservation Corps during the summers of 2004-2006. BLM sponsored a National Public Lands Day event on the trail in September of 2004. Volunteers, primarily from the Shoshone Back Country Horsemen, rode the trail and trimmed vegetation.

3.13.2 Recreation Opportunity Spectrum

Recreation opportunities in the Cody Field Office area were identified during the Cody RMP planning process using the Recreation Opportunity Spectrum (ROS). The Little Mountain planning area was determined to have opportunities in the Semiprimitive Nonmotorized, Semiprimitive Motorized, and Roaded Natural opportunity classes. The Cody RMP Draft EIS describes the semiprimitive nonmotorized opportunities as follows, "These opportunities offer solitude in natural environments and activities such as camping, hiking, sightseeing, spelunking, nature study, hunting and fishing" (p. 177). The Cody RMP Draft EIS describes the semiprimitive motorized opportunities as follows, "This term explicitly includes an opportunity to use motorized equipment in a natural environment" (p. 177). The Cody RMP Draft EIS describes the Roaded Natural opportunities as follows, "Such opportunities offer affiliation with others in an isolated environment in activities such as picnicking, rock collecting, wood collecting, and driving for pleasure" (p. 177). The recreation opportunity classes are shown on Map 42 in the RMP Draft EIS.

The Recreation Opportunity Spectrum (ROS) has been used to inventory and describe the range of recreation opportunities available based on the physical (characteristics of the land and facilities), social (interactions and contact with others), and administrative (services and controls provided) characteristics of an area. The key concept is that the recreation opportunities that can be produced and associated beneficial outcomes that can be realized are dependent on the character of the recreation settings. The recreational settings are described on a continuum ranging from Primitive to Urban.

A more detailed assessment of the recreation opportunities within the Little Mountain Planning area using the updated ROS terminology from the *Natural Resource Recreation Settings Matrix*

was completed as a part of this planning effort and is described in detail in Section 3.14.3 West Slope SRMA, below.

3.14 Special Management Areas

3.14.1 Little Mountain Area of Critical Environmental Concern (ACEC)

An area is designated as an Area of Critical Environmental Concern (ACEC) when special management attention is required to protect specific relevant and important values, or to provide public safety from natural hazards. These values can include important historic, cultural, or scenic values, fish and wildlife resources or other natural systems or processes (43 CFR 1610.7-2a).

The Cody RMP contained a decision which made the northern portion of the Little Mountain planning area an ACEC covering 22,270 acres. This ACEC lies within the West Slope SRMA. Porcupine, Trout, Deer, and a portion of Oasis Spring Creeks lie within the ACEC. The management objectives for the ACEC are to protect and manage important cave, cultural, and paleontological resources, and to maintain scenic values. The RMP included a decision that an activity plan would be written to address management of the significant cultural, paleontological, and scenic values. The Little Mountain Activity Plan will fulfill that requirement.

3.14.2 Five Springs Falls Area of Critical Environmental Concern (ACEC)

The Cody RMP contained a decision which made an area near Five Springs Falls Campground an ACEC covering about 160 acres. This ACEC lies within the West Slope SRMA. The management objectives for the ACEC are to protect existing populations of four near-endemic rare and sensitive plant species in the Five Springs Falls area. The RMP included a decision that an activity plan would be written to address management of the Five Springs Falls ACEC. The Little Mountain Activity Plan will fulfill that requirement.

3.14.3 West Slope Special Recreation Management Area

The Cody Resource Management Plan (RMP) established the West Slope SRMA covering about 101,000 acres of public land along the west slope of the Bighorn Mountains. The West Slope SRMA is used by the public for hunting, fishing, caving, sightseeing, camping, hiking, and horseback riding. The RMP also indicated that directional and interpretive signs would be added to facilitate recreational use of the SRMA.

For the purposes of this planning effort, an assessment of the recreation opportunities available within the northern portion of the West Slope SRMA was conducted. Based on the new guidance in Appendix C of the Land Use Planning Handbook (H-1601-1), three potential recreation management zones, each filling a unique niche within the recreation-tourism market for this SRMA, have been identified. The potential zones will be used in this planning effort to describe the recreation experiences and beneficial outcomes that are currently available, or could be targeted by management objectives. This information will guide consideration of the management actions proposed in this plan. Understanding the recreation opportunities that are currently and/or potentially available and the settings required to produce those opportunities will facilitate a more accurate assessment of the potential impacts of proposed actions on the

recreation opportunities. The Recreation Opportunity Spectrum maps and the Natural Resource Recreation Settings Matrix are included as Appendix 1 of this EA.

Trails Recreation Management Zone (RMZ)

The Trails RMZ contains a network of non-motorized trails connecting to additional trails in the Bighorn National Forest that provide access to explore the remote, undeveloped backcountry of the Little Mountain area, including the rugged canyons and suitable Wild and Scenic River segments. Limited motorized access is available on main roads within this RMZ.

The Natural Resource Recreation Settings range from Primitive to Front Country in this zone. The physical settings (Back Country, Middle Country) are characterized by remoteness, naturalness and facilities. The area is on or near four-wheel drive roads with some areas that are at least ½ mile away from any roads, the landscape is naturally-appearing except for the obvious primitive roads. The facilities consist of trailheads and trails. The social settings (Primitive, Back Country) are characterized by contacts with other groups, group size, and evidence of use. A typical day in this zone may involve 3-6 encounters with an average group size of 4-6 people with some evidence of use. The contacts and group size in the more remote areas of the zone would typically be 3 or fewer. The administrative settings (Back Country, Middle Country) are characterized by mechanized use, visitor services, and management controls. The primitive roads in the area are frequented by four-wheel drives and ATVs as well as mechanized and non-motorized uses. The trails and back country areas are primarily for non-motorized uses with some limited opportunities for mechanized uses such as mountain biking. The visitor services and management controls are generally low and include basic maps, signs at key access points, and occasional regulatory signs. The activity opportunities and the experience and benefit opportunities and outcomes are described in the table below.

Table 7

TRAILS RECREATION MANAGEMENT ZONE TARGETED OPPORTUNITIES & OUTCOMES		
Activity Opportunities	**Experience Opportunities & Outcomes**	**Benefit Opportunities & Outcomes**
Horseback riding Hiking Mountain Biking Hunting	Savoring the total sensory – sight, sound and smell – experience of natural landscapes Enjoying getting some needed physical exercise Escaping everyday responsibilities for awhile Enjoying having access to close-to-home outdoor amenities Enjoying the closeness of	**Personal:** - improved mental well-being - Restored mind from unwanted stress - stronger ties with family and friends **Community/Social:** - heightened sense of satisfaction with our community - enlarged sense of community dependency on public lands **Environmental:** - maintenance of distinctive recreation setting character - increased awareness and protection of natural landscapes **Economic:** - increased desirability as a place to live or retire

	friends and family	- enhanced ability for visitors to find areas providing wanted recreation experiences and benefits - increased local tourism revenue

Off-Highway Vehicle Recreation Management Zone (RMZ)

The Off-Highway Vehicle RMZ is characterized by opportunities for scenic four wheel driving and challenging ATV loop rides from a central trailhead. Developed campgrounds provide outstanding scenic vistas, ideal for family or group outings and travelers along Highway 14 Alternate, the main route between Yellowstone National Park and the Black Hills.

The Natural Resource Recreation Settings range from Back Country to Rural in this zone. The physical settings (Back Country, Middle Country, Front Country, Rural) are characterized by remoteness, naturalness and facilities. This zone contains Highway 14 Alt. on the south and includes improved gravel roads, four-wheel drive roads and some areas that are at least ½ mile away from any roads. The landscape is generally naturally-appearing except for the area near the highway and the obvious primitive roads. The facilities consist of trails, trailheads, and developed campgrounds with picnic tables, corrals, fire rings, and outhouses. The social settings (Primitive, Back Country, Middle Country) are characterized by contacts with other groups, group size, and evidence of use. A typical day in this zone may involve 7-14 encounters with an average group size of 7-12 people near the highway and the developed recreation sites. The contacts and group size in the more remote areas of the zone would typically be 3 or fewer. The area has moderate to low evidence of use. The administrative settings (Back Country, Middle Country, Rural) are characterized by mechanized use, visitor services, and management controls. The highway and developed recreation sites receive ordinary highway auto and truck traffic; vehicle use in the more remote areas is by four-wheel drives and ATVs as well as mechanized and non-motorized uses. The visitor services and management controls within the developed recreation sites are moderate with clearly posted rules and occasional enforcement presence. Visitor services and management control in the more remote areas are generally low and include basic maps, signs at key access points, and occasional regulatory signs. The activity opportunities and the experience and benefit opportunities and outcomes are described in the table below.

Table 8

OHV RECREATION MANAGEMENT ZONE TARGETED OPPORTUNITIES & OUTCOMES		
Activity Opportunities	**Experience Opportunities & Outcomes**	**Benefit Opportunities & Outcomes**
Scenic four wheel driving ATV loop riding Camping Hunting	Developing your skills and abilities Enjoying the closeness of friends and family Escaping everyday responsibilities for awhile Learning more about local history	**Personal:** - stronger ties with family and friends - Restored mind from unwanted stress - enlarged sense of personal accountability for acting responsibly on public lands. **Community/Social:** - heightened sense of satisfaction with our community - enlarged sense of community dependency on public lands **Environmental:**

	Enjoying having access to close-to-home outdoor amenities	- greater protection of area historic structures and archaeologic sites. - increased awareness and protection of natural landscapes **Economic:** - increased desirability as a place to live or retire - enhanced ability for visitors to find areas providing wanted recreation experiences and benefits - increased local tourism revenue

Caves Recreation Management Zone (RMZ)

The Caves RMZ is characterized by opportunities for recreational caving in wild and undeveloped caves of national significance. Opportunities for scientific study of karst topography and the associated biological, historical, cultural, and paleontological resources exist.

The Natural Resource Recreation Settings range from Primitive to Front Country in this zone. The physical settings (Middle Country, Front Country) are characterized by remoteness, naturalness and facilities. This area is on or near improved roads and four-wheel drive roads. The landscape is generally naturally-appearing except for the roads, structures and disturbances associated with past uranium mining activities. The facilities consist of primitive trails. The social settings (Primitive, Back Country) are characterized by contacts with other groups, group size, and evidence of use. A typical day in this zone may involve 3-6 encounters with an average group size of 4-6 people with some evidence of use. The contacts and group size in the more remote areas of the zone would typically be 3 or fewer. The area has moderate to low evidence of use. The administrative settings (Middle Country) are characterized by mechanized use, visitor services, and management controls. The roads in the area are frequented by four-wheel drives and ATVs as well as mechanized and non-motorized uses. The visitor services and management controls are moderate with clearly posted rules near the caves and the mine areas, cave gates, basic maps, and occasional regulatory signs. The activity opportunities and the experience and benefit opportunities and outcomes are described in the table below.

Table 9

CAVES RECREATION MANAGEMENT ZONE TARGETED OPPORTUNITIES & OUTCOMES		
Activity Opportunities	**Experience Opportunities & Outcomes**	**Benefit Opportunities & Outcomes**
Caving Dispersed camping Hiking Sightseeing	Developing skills and abilities in an undeveloped cave environment. Enjoying risk-taking adventure Enjoying exploring different natural landscapes Learning about cultural and paleontological resources	**Personal:** - Greater self reliance - Improved teamwork and cooperation - Deeper sense of personal humility - Greater sense of adventure - Improved physical capacity to do my favorite recreation activities **Community/Social:** - greater community involvement in recreation and other land use decisions **Environmental:** - greater community ownership and stewardship of park, recreation, and natural resources

		- increased awareness and protection of natural landscapes - greater protection of area historic structures and archaeologic sites. **Economic:** - enhanced ability for visitors to find areas providing wanted recreation experiences and benefits

3.14.4 Worland Caves Special Recreation Management Area

The BLM manages caves in Worland Caves Special Recreation Management Area (SRMA), including Natural Trap and Horsethief Cave on Little Mountain. The caves are found in the Madison Limestone formation and the potential for additional cave resources to exist in the general area is high. Any newly discovered significant caves would be added to the Worland Caves SRMA. Caves are fragile, nonrenewable resources that contain cultural, paleontological, hydrologic, geologic, and biologic values. Caves are also a significant resource for recreational, scientific and educational purposes.

3.14.5 Wild and Scenic Rivers

In 1993, BLM administered public lands along Porcupine Creek, and the Deer Creek, Oasis Spring Creek, and Trout Creek tributaries to Porcupine Creek, were identified as meeting the Wild and Scenic Rivers eligibility criteria and suitability factors. This determination was made based on the presence of outstandingly remarkable values relating to scenic, recreational, and cultural resources. The scenery along Porcupine Creek is characterized by the dramatic vertical drop of the walls of Devil Canyon, the dense riparian vegetation, and the lack of human presence. The scenery is enhanced by the contrast between the red, tan, and grey rocks, light green or tan grasses and dark green riparian vegetation. The opportunities for primitive recreation including fishing, hiking, nature study, photography, historical/geological study, camping and cave exploration are outstanding. Important cultural and historic resources are known to exist in the general area. All of the suitable river segments are classified as “wild” under the Wild and Scenic Rivers Act with the exception of portions of Porcupine and Deer Creek that are paralleled by a road. These segments are classified as “scenic”. All of the suitable segments are located on public land managed by the BLM with the exception of a one half mile portion of Porcupine Creek that crosses private land. The private land is owned by the Trust for Public Lands with a goal of future ownership by the BLM.

The river segments that have been determined to be suitable for inclusion in the Wild and Scenic Rivers System will be managed to provide protection for the free-flowing characteristics and the identified outstandingly remarkable values, and to prevent reduction in the tentative WSR classification (i.e. from wild to scenic or recreational, or from scenic to recreational). They will be managed this way until congress considers them for possible designation. The final boundary of a designated Wild and Scenic River in which the identified resource values must be protected is generally one quarter mile (1,320 feet) from the high water mark on both sides of the river. This boundary may vary as long as the total width of the corridor averages no more than one half mile (2,640 feet) per river mile.

In 2003 W&S River Interim Management Prescriptions were developed. The results of the Wild and Scenic Review Final report are to be made part of the Management Situation Analysis and presented to the public for review and comment during the upcoming Cody RMP revision scoping process.

3.14.6 West Slope Habitat Management Area

The West Slope Habitat Management Plan (HMP) was signed in 1984 and was prepared by the BLM Worland District in cooperation with the Wyoming Game and Fish Department. The goals of the plan are to maintain and improve habitat conditions for all wildlife through good ecosystem management and to conduct needed inventories and resource assessments.

Recreation and wildlife are highly interdependent in the HMP area. Sound wildlife management is needed to insure a continuing supply of wildlife-based recreation opportunities. Proper management of recreation use can benefit wildlife by helping to accomplish harvest objectives and by preventing wildlife disturbance by recreationists during certain times of the year. Close coordination of wildlife and recreation management plans and actions will be required on a continuing basis in the interest of both programs. The following wildlife concerns will be considered in the development of recreation plans.

1. Area closures
2. Road closures
3. Access acquisition
4. Seasonal use restrictions
5. Careful placement of user facilities

4.0 ENVIRONMENTAL CONSEQUENCES

The following are mandatory elements and/or environmental resources that are required for consideration in all NEPA analyses. All of these elements were reviewed against the four alternatives and any element that was affected from consideration of the activity plan is discussed and analyzed in narrative.

Table 10

Mandatory Elements				
Element	**Alt. 1 – Proposed Action**	**Alt. 2 – Resource Protection**	**Alt. 3 – Access**	**Alt. 4 – No Action**
Air Quality	See Text (4.1.4)	See Text (4.2)	See Text (4.3)	See Text (4.4)
Areas of Critical Environmental Concern	See Text (4.1.13)	See Text (4.2)	See Text (4.3)	See Text (4.4)
Cultural Resources	See Text (4.1.10)	See Text (4.2)	See Text (4.3)	See Text (4.4)
Farm Lands (prime or unique)	Not Affected	Not Affected	Not Affected	Not Affected
Flood Plains	See Text (4.1.5)	See Text (4.2)	See Text (4.3)	See Text (4.4)
Native American	Not Affected	Not Affected	Not Affected	Not Affected

Religious Concerns				
Wastes, Hazardous or Solid	Not Affected	Not Affected	Not Affected	Not Affected
Water Quality, Drinking or Ground	See Text (4.1.5)	See Text (4.2)	See Text (4.3)	See Text (4.4)
Wetlands/Riparian Zones	See Text (4.1.5)	See Text (4.2)	See Text (4.3)	See Text (4.4)
Wild and Scenic Rivers	See Text (4.1.13)	See Text (4.2)	See Text (4.3)	See Text (4.4)
Wilderness	Not Affected	Not Affected	Not Affected	Not Affected
Environmental Justice	No identified disparate impact to any minority or disadvantaged population			
Invasive, Non-Native Species (Weeds)	See Text (4.1.2.1)	See Text (4.2)	See Text (4.3)	See Text (4.4)
Threatened or Endangered Species	See Text (4.1.7.1)	See Text (4.2)	See Text (4.3)	See Text (4.4)

The following impact analysis consists of those impacts that were considered to be substantial enough to warrant narrative as determined by the preparers and reviewers. The threshold of impacts is directed at "real environmental issues" that affect the "quality of the human environment" as stated in the policy of CEQ regulations 40 CFR 1500.2.

4.1 Alternative 1 – Proposed Action – Approve the Little Mountain Activity Plan (environmental impacts)

4.1.1 Travel Management and Access

The proposed action would implement the Little Mountain Activity Plan and would designate routes as shown on MAP 1: Little Mountain Planning Area – Alternative 1. Table 11 below lists the approximate road mileage in each designation category for alternative 1.

Table 11

Little Mountain Planning Area Alternative 1 Route Statistics	
Road Type	**Miles**
Open	185
ATV and Non-Motorized Use Only	14
Closed	61
None (private and state lands)	33
Total:	**293**

Note: approximate mileage calculated from ArcMap shapefile data

Devils Canyon Road and Gate

In alternative 1, public access via foot, horseback, and mountain bike would be allowed through the locked gate. This would enhance the non-motorized recreation opportunities in the canyon. Although the public is currently allowed to access the canyon by foot and horseback, there is not an easy access route around the gate. Modification of the gate to allow easier access for non-motorized modes of travel has the potential to slightly increase the public use levels. Pursuing

development of a legal public access route to the gate in the future, as described in the plan would enhance public access to public land in and around Devil's Canyon. There is a potential for travel by foot, horseback, and mountain bike and associated camping and fishing activities in the canyon to damage the riparian vegetation and increase erosion along the stream bank, however this potential is less than would be expected with motorized vehicle access. Evaluating and designating appropriate camping areas in the canyon would help limit the disturbance of riparian vegetation and other important resources. This alternative would result in a reduction in the total number of vehicles allowed in the canyon, since motorized uses would be allowed only for administrative purposes. Motorized use of the road would continue for administrative purposes of the private landowner and land management agencies. This would continue to pose a safety hazard for vehicles traveling on the steep grades.

Seasonal Closure

The seasonal closure to motorized vehicles from December 1 – April 30 would provide protection for wintering wildlife in crucial big game winter range. This protection would enhance wildlife populations and big game hunting opportunities. Since motorized vehicles would not be allowed on the roads during the seasonal closure, the potential for vehicles to cause ruts and resource damage by driving on wet and muddy roads would be reduced. Implementing the seasonal closure would pose additional restrictions on the recreating public and would increase the administrative presence of the BLM in this area. The impact of additional restrictions is expected to be minimal because vehicle access to a majority of the planning area is available year-round. The proposed closure areas have very difficult vehicle access during winter months and because of remote locations could pose a safety risk for motorized vehicle users during the proposed closure period. Public safety concerns could be reduced by the implementation of this seasonal closure. Allowing exceptions for certain administrative uses, emergency use, and flexibility in the closure dates would accommodate future management needs as deemed appropriate by the BLM Authorized Officer.

Mountain Bike Use

In alternative 1, mountain bike use would not be allowed on Cottonwood Creek Trail. The trail would be designated for foot and horseback use only. This designation would help reduce safety concerns related to concentrated equestrian use and limited sight distance and steep grades. There is a concern that mountain bikes traveling downhill at high speeds would create a safety hazard for horseback riders along the trail. Mountain bikes would not be allowed on "wild" segments of suitable Wild and Scenic Rivers; this would be consistent with the Interim Management Prescriptions for the Wild and Scenic Rivers. This designation would enhance opportunities for non-motorized, non-mechanized trail uses and would slightly decrease opportunities for single-track mountain bike use.

4.1.2 Vegetation

Motorized vehicle travel on established routes would have little impact on vegetation. Cross - country vehicle travel has the potential to crush or uproot vegetation and leaves visible tracks that others often follow. Implementing the ORV designations would allow the area to produce slightly more vegetation on the closed routes, enhancing the forage for livestock and wildlife and ground cover for improved watershed function. Eliminating or greatly reducing the occurrence

of cross-country vehicle travel would reduce the impacts to existing vegetation, which would help reduce the spread of weeds.

4.1.2.1 Weeds

Weed seeds are naturally spread by water, wind, birds, and animals. Weed seeds can also be spread by people and/or their vehicles. Weed seeds are often carried in vehicle radiators, undercarriages, or tire treads or are attached to clothing, shoes, or animal fur. The seeds may fall off and become established in areas where weeds were not previously located. Areas where soil and vegetation have been disturbed due to cross-country travel or other disturbance are especially susceptible to establishment of invasive, non-native species.

Designation of some routes and closure of others would help prevent further spread of weeds by vehicles. Reduction of cross-country travel and elimination of duplicate routes would reduce the risk of spreading weeds to previously undisturbed areas. Proper treatment of weeds in the area would need to be addressed with maintenance considerations for the roads. Weed treatment and control would be developed in conjunction with road closures and rehabilitation efforts. The treatment and control methods would reduce the potential for weeds to become established during rehabilitation efforts. Educational efforts would be pursued to ensure that public land users are aware of techniques to prevent the spread of invasive, non-native species. Weed treatments would continue to be coordinated between Big Horn County Weed and Pest and BLM as staff and funding allow. Refer to the Activity Plan Action Items: Education and Information, Rehabilitation, and Maintenance for specific action related to weed control efforts.

4.1.3 Soils

Factors such as steep slopes, amount of vegetation, amount of water runoff, and wind affect the amount and rate of natural erosion of soils that are susceptible to damage. Erosion is accelerated by surface disturbances, such as travel by OHVs. The presence of roads leaves more soil exposed to wind and water erosion. Graded road surfaces form an impermeable layer, increasing the amount of overland water flow near and downslope from the road. If not properly constructed and maintained, this can cause problems with erosion, especially if water flow is concentrated into channels which are not accustomed to such flow. Two-track roads also have the potential for increased soil loss. The soil in the ruts can become compacted concentrating flow down an artificial channel. When ruts become too deep to drive in, vehicles bypass the area causing route braiding or multiple routes. Trails and two-track routes intercept and concentrate overland flow which increases the erosive power of water. Erosion of the route occurs as a result of the increased volume of water running down them.

Implementing the travel management designations would decrease the total amount of erosion associated with roads in the planning area. Soil stability would improve on the closed routes that are allowed to revegetate, leaving less soil exposed to wind and water erosion.

4.1.4 Air quality

Motorized vehicles create exhaust and dust when traveling on dirt roads. This may lead to short term impacts to the air quality in the immediate location of the vehicle. Areas with no vegetation

such as roads and two-tracks are susceptible to wind erosion and are sources of dust. This would not impact overall air quality of the region.

4.1.5 Water

Increased runoff and sediment would impact the streams in the area. If runoff increases, due to increased road density, loss of vegetation, and increased erosion, there is less water stored in the soil for later release. This impacts riparian areas and streams by reducing the amount of late season water they depend on. Implementing the proposed action should reduce runoff, erosion, and the amount of sediment reaching streams within the planning area as a result of increased plant cover and infiltration rates.

4.1.6 Visual Resource Management

Implementing the route designations would define an appropriate network of routes and would reduce the occurrence of unauthorized cross-country travel or travel on routes not suitable for the vehicle type. Some of the existing roads that do not receive regular use are naturally re-vegetating, increasing soil stability on these sites. A portion of the routes proposed for closure would be rehabilitated as described in the activity plan. Rehabilitation efforts such as ripping the route surface with a small dozer to create a rough surface and applying seed would result in short term surface disturbance and impacts to visual resources. Since the rehabilitation efforts would take place within the existing route surface, visual impacts are not expected to be greater than those in the existing environment. Re-seeding and subsequent revegetation would increase the site stability, reduce the potential for establishment of invasive species, and reduce impacts to visual resources. The route closures and rehabilitation efforts in the proposed action would have an overall beneficial affect on soils, vegetation, water and visual resources.

Visual resources would be positively impacted through reclamation efforts that would obliterate closed routes, and reduce route proliferation, returning the area to a more natural appearance. Visual resources would be negatively impacted by an increased number of signs and route markers, and man-made barriers in the area. This would be mitigated through consideration of sign and marker design, color and placement.

4.1.7 Wildlife

Limiting vehicles to a designated network of routes would reduce disturbance to wildlife by motorized vehicles. Rehabilitation of closed routes would reduce habitat fragmentation in the area. Revegetation of closed routes and minimization of cross-country vehicle travel would reduce the potential impacts of vehicle travel and invasive species on sagebrush habitat and sagebrush obligate wildlife species. Implementing the activity plan would improve the overall quality of wildlife habitat in the area. The spring and early summer time period is an important reproductive period for wildlife species. Vehicle travel on roads during this time period has the potential to disturb young or nesting wildlife. Seasonal restrictions may be necessary and the need for them would be determined on a case-by-case basis.

The proposed action would implement a seasonal closure to motorized vehicles on the top of Little Mountain. This seasonal closure would provide protection to wintering wildlife in big game crucial winter range. Vehicle traffic generally can disrupt wildlife distribution and can

displace animals from favorable habitat throughout the year, but during winter months, wildlife is most stressed by limited food availability and temperature extremes and disturbance is much more likely to have detrimental effects to wildlife species. Seasonal closures have been implemented in several other areas administered by the BLM Cody field Office and are supported by the Wyoming Game and Fish Department. The proposed closure periods would be after the close of nearly all recreational hunting seasons with the exception of winter mountain lion hunting. If closures are implemented, there will still be many areas available for mountain lion hunters to pursue these trophy game animals in this hunting unit. See additional analysis in section 4.1.1 above.

The proposed action would reduce peak flows, increase base flows, and reduce sediment delivery to area streams. This would improve fish habitat by reducing negative impacts to fish habitat diversity that result from extreme flood-flow events, providing deeper water during low flow periods, i.e., late fall and winter, and increasing the amount of clean gravel and rubble that is used as habitat for aquatic invertebrates and which is used by adult fish for spawning and by young fish as over-wintering habitat.

4.1.7.1 Special Status Species

Designating some routes and closing others would not affect listed or candidate species under the Endangered Species Act or species on the BLM sensitive species list. Rehabilitation of closed routes and minimization of cross-country vehicle travel would prevent additional unnecessary disturbance to wildlife habitat in the area and allow improvement to habitat in areas disturbed by previous illegal off-road travel. Threatened & Endangered (T&E) listed species would not be affected by any of the proposed alternatives because these species do not currently occupy the planning area. Sensitive species should benefit from controlled vehicular use through less disturbance and improved habitat conditions in rehabilitated areas. Sagebrush obligate species would likely see fewer impacts from vehicles if single access routes are designated in areas that currently have multiple roads and trails. Yellowstone River cutthroat trout status would improve if the proposed action was implemented because peak flows would be reduced, base flows would increase, and sediment delivered to streams would decrease. Sensitive species habitat conditions are less likely to be affected by human activities and presence if travel management is controlled in a better manner than the current situation.

4.1.8 Range

There are 12 livestock grazing allotments within the geographic area covered by this plan. The permittees have been contacted regarding implementation of the activity plan. Implementation of the ORV designation is not expected to impact livestock grazing operations. Forage would be increased on rehabilitated routes, and fewer disturbances of livestock would result from vehicle travel. Public information and education may need to include such items as: not trespassing on private lands; protecting natural resource values and any improvements on both private and public lands; responsibility for the prompt repair of any damages to utilities, fences, and other improvements; no harassment of livestock or destruction of private and public improvements; and gates left open or closed, as they were found.

4.1.9 Geology & Minerals

Surface land uses have the potential to impact karst topography and cave resources, primarily through water and erosion. By reducing soil permeability, or by diverting surface water, the flow of water to some speleothems could be altered, and/or additional sediment could be introduced into the cave environments, potentially impacting development of cave formations.

A Land Management Hazard Assessment Map was prepared as a part of the Cave and Karst Hydrology Assessment Project for Horsethief Cave, Wyoming (Aley, 1984). This map depicts lands in the "low, moderate, high, and extremely high" hazard categories. These categories are based on the potential for surface activities to impact known cave passages, and are based on soil depth, lateral distance from cave passages, and topographic features. The Land Management Hazard Assessment Map was used to assist in route selection near Horsethief cave.

The proposed action would designate one main access route to the cave area, and close all duplicate routes that have the potential to impact cave resources. Proposed route designations near known cave passages would provide adequate public access while reducing potential impacts to caves associated with roads. Other known caves and cave passages were also considered during development of the route designation recommendations. Limiting motorized vehicles to designated routes within the entire planning area would reduce the potential for negative impacts to cave systems and karst topography.

The main access road to the Horsethief Cave area currently has segments of rutting and duplicate routes where vehicles have avoided wet and muddy road areas. The proposed maintenance of this road would reduce rutting and the creation of additional duplicate routes. By maintaining one main route in good condition, the resource impacts associated with soils, vegetation, erosion, water runoff, and the potential impacts to cave passages would be reduced.

4.1.10 Cultural & Paleontological Resources

Tribal representatives on the Northern Wyoming Native American Consultation mailing list have been notified of the activity planning process and have been invited to identify any concerns about sites significant to the history, culture, or religion of Native Americans within the project area pursuant to the National Historic Preservation Act of 1966 as amended (P.L. 89-665; 80 Stat. 915; 16 U.S.C. 470) or any sacred sites pursuant to Executive Order 13007 signed May 24, 1996.
The Cheyenne River Sioux Tribe Preservation Program of Eagle Butte, South Dakota has requested to be kept informed of project activities and or issues and the Blackfeet Planning & Development Office of Browning, Montana declined to participate in the consultation process for this project. They were invited to identify specific cultural resource, religious or other cultural concerns that may need to be addressed in this analysis. The Draft Little Mountain Activity Plan and this EA will be provided to those who requested additional information, to the updated Northern Wyoming Native American Consultation mailing list, and to the State Historic Preservation Office for review. Any information provided in response will be taken into consideration during development of the Final Plan and Decision Record.

Designation of vehicle routes generally has the beneficial effect of controlling impacts of OHV use on public lands, including potential impacts to cultural and paleontological resources.

Identification of a clearly defined network of routes open to motorized vehicles reduces the potential for user caused route proliferation, and enhances the ability of law enforcement to respond to unauthorized uses.

All of the proposed route designations are for existing vehicle routes that have been used by motorized vehicles for many years. The proposed route designations would not change or would reduce the type and amount of vehicle use that is currently occurring. The proposed route designations are not expected to shift, concentrate or expand the current OHV travel that is currently occurring within the planning area. The proposed route closures would eliminate duplicate routes to the same location while directing vehicles to the well established, main routes. Allowing continued use of existing routes, imposing new limitations on existing routes (ie: seasonal closures, limiting certain routes to ATVs or smaller vehicles), or closing routes is unlikely to adversely affect cultural resources.

Rehabilitation of closed routes has the potential to impact cultural resources. Rehabilitation work would generally be done within the existing road surface disturbance. No new road construction is proposed. Any future proposed route rehabilitation or maintenance projects, new route construction, or other surface disturbing projects would be subject to individual project review for potential impacts to cultural resources. The cultural review for each individual project would determine the cultural resources inventory efforts that would be required prior to project implementation. Any proposed projects would be subject to the following and any additional stipulations necessary for the protection of cultural resources:

> Cultural Resources, Standard Stipulations. The operator/holder/BLM is responsible for informing all persons associated with this project that they may be subject to prosecution for knowingly damaging, altering, excavating or removing any archaeological, historical, or vertebrate fossil objects or site. If archaeological, historical, Native American, or vertebrate fossil materials are discovered, the operator/holder/BLM is to suspend all operations that further disturb such materials and immediately contact the Authorized Officer. Operations are not to resume until written authorization to proceed is issued by the Authorized Officer (AO).
>
> The Authorized Officer will evaluate, or will have evaluated, such discoveries not later than five working days after being notified, and will determine what action shall be taken with respect to such discoveries. The decision as to the appropriate measures to mitigate adverse effects to significant cultural or Paleontological resources will be made by the Authorized Officer after consulting with the operator/holder/BLM. The operator/holder/BLM is responsible for the cost of any investigations necessary for the evaluation, and any mitigative measures required by the Authorized Officer. The AO will provide technical and procedural guidelines for the conduct of evaluation and mitigation. Upon verification from the AO that the required evaluation and/or mitigation has been completed, the operator/holder/BLM will be allowed to resume operations.
>
> Native American Resources. The area under consideration may contain areas or locations of religious or cultural concern to Native Americans, but these areas have not yet been identified. If such areas are subsequently identified or become

known through the Native American notification or consultation process they would be considered during the implementation phase. The BLM would take no action that would adversely affect these areas or locations without consultation with the appropriate Native Americans.

Human Remains. If human remains are discovered or suspected the operator shall suspend operations immediately, physically guard the area, and notify BLM immediately.

The action items proposed throughout the activity plan related to education and information, signing, and law enforcement emphasize the need to protect, study, and expand the interpretation of cultural and paleontological resources within the planning area. The activity plan would serve as a proactive means to enhance public awareness and resource protection related to the important cultural and paleontological resources within the planning area.

4.1.11 Wilderness Characteristics

The ACEC designation, Wild & Scenic River interim management prescriptions and the Standard Mitigation Guidelines for Surface-Disturbing Activities (Cody RMP, Appendix B) would adequately protect and maintain resource values such as those associated with the concept of wilderness.

4.1.12 Recreation

The proposed recreation management actions would be consistent with the activity opportunities and the experiences and benefit opportunities and outcomes described in the three recreation management zones identified in the West Slope SRMA description (See section 3.14.3). By describing the recreation supply (Recreation Opportunity Spectrum, Natural Resource Recreation Settings) and assessing the known recreation demand (information from public comments, public meetings, and use trends) it is possible to identify specific benefit outcomes that can be produced in each identified zone within the SRMA. Consideration is given to the capacity of each recreation management zone to produce desired recreation opportunities, the availability of other similar opportunities within the immediate market area and the preferences of both visitor and resident customers. Realizing that not all desired recreation opportunities can be provided everywhere, the outcomes most appropriate to each zone can be targeted, or influenced by management actions.

Trails Recreation Management Zone

The proposed route closures within the Trails RMZ would enhance opportunities for non-motorized trail activities away from the influence of motorized vehicles. Maintenance and improvement of existing trails and development of the proposed connector trails would also enhance opportunities for non-motorized trail activities. The emphasis on non-motorized recreation in this zone along with the proposed seasonal closure would enhance wildlife habitat along with hunting and wildlife viewing opportunities. The proposed actions would also be consistent with the management objectives of the Little Mountain ACEC and the suitable Wild and Scenic River segments.

Off-Highway Vehicle Recreation Management Zone

The proposed route designations, including identified ATV loop trails within the OHV zone enhances opportunities for a variety of motorized recreation of varying levels of difficulty, from family outings and sightseeing to challenging ATV riding. The developed campgrounds and trailheads provide designated camping and parking areas for recreation opportunities throughout the planning area.

Caves Recreation Management Zone

The proposed route designations within the Caves zone would provide adequate access while minimizing the impact of roads on the cave resources. The route closures near the old uranium mines and associated structures would enhance public health and safety.

Recreation Management Actions Common to all Zones

Camping by the general public is allowed anywhere on BLM-managed public lands for a maximum of 14-days within any period of 28 consecutive days. People wishing to camp on BLM-managed public land for more than 14-days must move outside of a 5-mile radius of the previous location. The most desirable camping locations in the planning area are near springs, cabins and scenic viewpoints. These popular camping areas are subject to trampling of riparian areas and vegetation by people and livestock, impacts associated with parking vehicles and trailers, creation of social trails within the campsites, and disturbance or vandalism of important cultural or historic resources.

The specific action items for management within the West Slope SRMA would identify these desirable camping areas and evaluate them for needed resource protection actions such as fencing, signing, or parking/camping area delineation (see activity plan page 17). The proposed actions include installation of buck-and-pole fences or steel post and wire fences around springs, signing and fencing to direct travel by motorized vehicles, and signing to delineate appropriate camping and parking areas. Informational signs with site maps may be necessary in some locations. Any proposed actions would be subject to site-specific cultural and wildlife resource evaluations prior to implementation.

4.1.13 Special Management Areas

Implementation of the management actions carried forward from the RMP and any subsequent activity level planning associated with the special area designations would assist in meeting the management objectives and resource management goals set forth in the following special designations: Little Mountain ACEC, Five Springs Falls ACEC, West Slope SRMA, Worland Caves SRMA, Wild and Scenic Rivers Suitable Sections, West Slope Habitat Management Area.

4.1.14 Cumulative Impacts

Designation of an appropriate network of routes and closure and rehabilitation of others is expected to address public and administrative access needs, protect resources, promote public safety, and minimize conflicts among the various uses of public lands. Implementing the activity plan would end the slow process of resource degradation, which if not attended to, would produce long term adverse impacts. The overall effect of implementing the activity plan would be higher quality wildlife habitat, higher quality visual resources, enhanced protection of cultural, paleontological, and cave resources, and high quality OHV opportunities. Motorized OHV recreation and other forms of outdoor recreation are expected to continue to increase as the

general population increases, possibly leading to increased conflicts in popular recreation areas. As the OHV designation decisions in the Cody RMP are implemented, there would be an increase in limitations on OHVs and increased enforcement of the designations. Cumulatively, this would lead to an increased management presence throughout the Cody Field Office area in the form of signs and markers, personnel conducting monitoring, and law enforcement.

4.2 Alternative 2 – Resource Protection Alternative (environmental impacts)

The route designation recommendations in alternative 2 represent all recommended route closures for the protection of soils, cultural resources and wildlife. This alternative would have similar environmental impacts as described in alternative 1, but would provide slightly more protection of resources due to additional road closures. This alternative would result in slightly fewer impacts to air quality, enhanced protection of cultural and paleontological resources, enhanced protection and possible improvement of water quality and riparian areas, a reduction in the spread of invasive, non-native species and enhanced protection of wildlife and special status wildlife species. This alternative would increase the management presence of the BLM throughout the planning area in the form of route closures and enforcement efforts. Figure 12 below lists the approximate road mileage in each designation category for Alternative 2.

Table 12

Little Mountain Planning Area Alternative 2 Route Statistics	
Road Type	**Miles**
Open	183
ATV and Non-Motorized Use Only	2
Closed	75
None (private and state lands)	33
Total:	**293**

Note: approximate mileage calculated from ArcMap shapefile data

Devils Canyon Road and Gate

Same as alternative 1

Seasonal Closure

In alternative 2, the seasonal closure to motorized vehicles would be implemented for the top of Little Mountain from December 1 - April 30 to protect crucial big game winter range. The anticipated impacts would be the same as described in Alternative 1, however no exceptions would be allowed except in emergency situations. This seasonal closure would provide slightly

more protection for wintering wildlife than in Alternative 1, but would greatly limit management flexibility and would not accommodate administrative access needs or future management needs.

Mountain Bike Use
Same as alternative 1.

Special Management Areas
Same as alternative 1.

4.2.1 Cumulative Impacts
The cumulative impacts of alternative 2 would be similar to those described in alternative 1, however additional limitations to motorized vehicles would result in slightly more beneficial impacts to wildlife habitat, visual resources, cultural, paleontological and cave resources. Opportunities for non-motorized forms of recreation would be enhanced. Cumulatively, there would be a greater management presence in the area in the form of signs and markers, personnel conduction monitoring, and law enforcement.

4.3 Alternative 3 – Access Alternative (environmental impacts)
The environmental impacts of designating all existing routes would have similar impacts to alternative 1 – Proposed Action, with the exception of actions related to barriers and rehabilitation, since no routes would be closed under this alternative. Selection of this alternative would allow the present resource impacts including runoff and erosion to continue, impacting downstream water quality, riparian areas and flood plains. Areas downstream would be affected from lower water quality, increased sediment and erosion. Invasive species are likely to spread to new locations and the rate of spread is likely to increase as vehicle use increases. As motorized recreation use levels increase over time, impacts to air quality, cultural and paleontological resources, wildlife habitat and special status wildlife species would also have the potential to increase. Concerns related to resource protection, public safety, and conflicts between various users of public lands would not be addressed to the extent that they are by alternative 1. Figure 13 below lists the approximate road mileage in each designation category for alternative 3.

Table 13

Little Mountain Planning Area Alternative 3 Route Statistics	
Road Type	**Miles**
Open	260
ATV and Non-Motorized Use Only	0
Closed	0
None (private and state lands)	33
Total:	**293**

Note: approximate mileage calculated from ArcMap shapefile data

Devils Canyon Road and Gate

In alternative 3, public access via foot, horseback, mountain bike, and ATVs would be allowed through the gate into Devil's Canyon. This would increase the total amount of motorized vehicle use and general public use of the canyon. Recreation activities including ATV parking, camping, and fishing in the narrow canyon has the potential to damage riparian vegetation, increase erosion along the stream banks, impact the fishery in Porcupine Creek and impact other important resources in the canyon. Motorized access by full size vehicles for the administrative purposes of the private landowner and land management agencies would continue to present a hazard associated with travel on the steep grades.

The steep canyon walls limit the possibility of vehicle use off of the main road; therefore impacts from vehicles illegally driving cross-country are not anticipated in this area. This alternative would maximize public access into the canyon for recreational purposes. Development of a "Limits of Acceptable Change" monitoring plan for the canyon would allow specific thresholds to be set to determine if unacceptable resource impacts or user conflicts are occurring that may need to be managed through ATV use limits or a permit system. Development of this monitoring program would require a detailed assessment of the current resource conditions, in cooperation with BLM resource specialists, to establish a baseline for future resource condition assessments.

Seasonal Closure

In alternative 3, no seasonal closure would be implemented. No additional protection would be provided to the wintering wildlife in big game crucial winter range. Vehicle access on the top of Little Mountain during the winter months has the potential to push the animals from one ridge to another as they attempt to avoid vehicles and people. This increases the stress level and causes the animals to expend energy that would otherwise help them survive the winter. This increased stress has the potential to impact big game populations and to decrease hunting opportunities. Motorized vehicle use on the top of Little Mountain during the winter months also has the potential for vehicles to cause ruts and resource damage by driving on wet and muddy roads. This can cause increased erosion and additional resource damage as vehicles tend to create new routes to avoid the ruts. Motorized use during winter periods also present risks to public safety. The proposed closure area has difficult and hazardous access routes during the winter months and can experience very severe weather and travel conditions. The location is remote and not easily accessible for rescue vehicles or personnel and would be a very difficult area to walk out of if an emergency situation should occur. Vehicle breakdowns could become life or death emergencies if users were not properly prepared and equipped.

Mountain Bike Use

In alternative 3, mountain bike use would be allowed on the Cottonwood Creek Trail. Information signs would be posted prominently at the trailhead and periodically along the trail to promote user ethics on shared trails. This would enhance the public understanding of their responsibilities to yield to other trail users and respect other modes of travel. Safety concerns related to concentrated equestrian use and limited sight distance and steep grades would remain, but would be reduced by educational efforts. Mountain bikes would not be allowed on "wild" segments of suitable Wild and Scenic Rivers; this would be consistent with the Interim Management Prescriptions for the Wild and Scenic Rivers.

Special Management Areas

Same as alternative 1.

4.3.1 Cumulative Impacts

The cumulative impacts of alternative 3 would be similar to those described in alternative 1; however fewer limitations would be placed on motorized vehicles. Designating all existing routes would reduce the potential for route proliferation over time, but would not be as beneficial to wildlife habitat, visual resources, cultural, paleontological and cave resources as alternatives 1 and 2. This alternative would maximize the opportunities for motorized vehicles access, as the population in surrounding communities continues to grow and the popularity of the area for motorized recreation increases, it would cumulatively lead to a decrease in the amount and quality of non-motorized recreation opportunities available in the area. Since no road closures would be in place, the area would generally maintain a low level management presence.

4.4 Alternative 4 – No Action (environmental impacts)

Alternative 4, No Action, would be a continuation of existing conditions. The ORV designation decision would not be implemented. An appropriate network of vehicle routes would not be defined, leaving the area susceptible to route proliferation due to unauthorized cross-country travel. Unauthorized routes and activities such as hill-climbing impact air quality, soils, vegetation, visual resources, wildlife, and cultural and paleontological resources through erosion and resource damage. Selection of the No Action alternative would allow the present runoff and erosion to continue and would likely increase as road density increases. This increased runoff and sediment from erosion degrades downstream water quality, riparian areas, flood plains, and fish and wildlife habitat. Areas downstream would be affected from lower water quality, increased sediment, erosion, and decreased fish and other wildlife. Noxious weed spread would likely increase as vehicle use increases and seed sources expand. Issues related to resource protection, public safety, and conflicts between various uses of public lands would not be addressed.

Devils Canyon Road and Gate

In Alternative 4, the gate would remain locked and public access would be controlled by the private landowner. This alternative would minimize public access through the gate for recreational purposes. The public could still access the canyon via foot, horseback, or mountain bike but no modifications would be made to the gate to facilitate this access. Some public use of the road with full size vehicles would continue to occur, posing increased safety concerns related to the narrow road and steep grades. No monitoring plan or use limitations would be considered, leaving the canyon susceptible to resource impacts and user conflicts.

Seasonal Closure

In alternative 4, no seasonal closure would be implemented. The anticipated impacts would be the same as described in alternative 3.

Mountain Bike Use

In alternative 4, mountain bike use would be allowed on the Cottonwood Creek Trail. No proactive educational efforts would be implemented. Safety concerns related to concentrated equestrian use and limited sight distance and steep grades would remain. Mountain bikes would

not be allowed on “wild” segments of suitable Wild and Scenic Rivers; this would be consistent with the Interim Management Prescriptions for the Wild and Scenic Rivers.

Special Management Areas

Implementation of the management actions in the RMP and any subsequent activity level planning associated with the special area designations would continue to be implemented on a case-by-case basis. An activity plan would not be developed to integrate management of multiple resources, resource designations, and activities in the planning area.

Cumulative Impacts

If no route designations are implemented, the slow, cumulative process of resource degradation would produce long term adverse impacts. Unregulated traffic and route proliferation could be expected to accumulate over time, causing accelerated impacts to wildlife habitat, visual resources, cultural, paleontological and cave resources, and soils. Motorized OHV recreation and other forms of outdoor recreation are expected to continue to increase as the general population increases, possibly leading to increased conflicts in popular recreation areas and decreased opportunities for non-motorized recreation throughout the planning area.

5.0 CONFORMANCE WITH EXISTING LAND USE PLANS

The Cody Resource Management Plan (RMP) was originally approved on November 8, 1990, and was amended on March 3, 2000. This activity plan provides guidance for the management of the special designations within the planning area including ACECs, SRMAs, Wild and Scenic River suitable segments and other resources. This activity plan implements the ORV designations for the Little Mountain planning area that were identified in the Cody RMP. The specific route designations and implementation actions are analyzed in this EA. This activity plan is consistent with the RMP management objectives listed in section 1.3.1 above.

Based on the above and the analysis contained in this EA, the Little Mountain Activity Plan, Alternative 1 – Proposed Action, Alternative 2 – Resource Protection Alternative, and Alternative 3 – Access Alternative would be in conformance with the Cody RMP objectives for ORV management. Alternative IV – No Action, would not be in conformance with the Cody RMP objectives for ORV management.

6.0 Consultation and Coordination

6.1 Distribution

This Environmental Assessment has been distributed to the public for review and comment. A news release was issued in the local media informing the public that the EA had been prepared and is available to the public. Copies of the EA are available at the Cody Field Office and on the website www.wy.blm.gov/nepa/cyfodocs/littlemountain/

6.2 Other Persons and Agencies Consulted:

Big Horn County Commissioners
Wyoming Game and Fish Department
Bighorn Canyon National Recreation Area, National Park Service

Bighorn National Forest, Forest Service
State Historic Preservation Office
Little Mountain Activity Plan Mailing List
Native American - Northern Wyoming Mailing List
E.O. Bischoff Ranch, Adjacent Landowner

7.0 References

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National Mountain Bicycling Strategic Action Plan. U.S. Department of the Interior. Bureau of Land Management. November 2002.

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The West Slope Habitat Management Plan (HMP),U.S. Department of the Interior, Bureau of Land Management, Worland District in cooperation with the Wyoming Game and Fish Department, 1984.

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Appendix 1

Little Mountain Planning Area
Natural Resource Recreation Settings Matrix

Recreation Opportunity Spectrum (ROS) Maps:

ROS Existing Physical Settings

ROS Existing Social Settings

ROS Existing Administrative Settings

Little Mountain Planning Area
Natural Resource Recreation Settings Matrix
Criteria for Classification and Prescriptions

Existing Settings

PHYSICAL – LAND & FACILITIES: character of the natural landscape

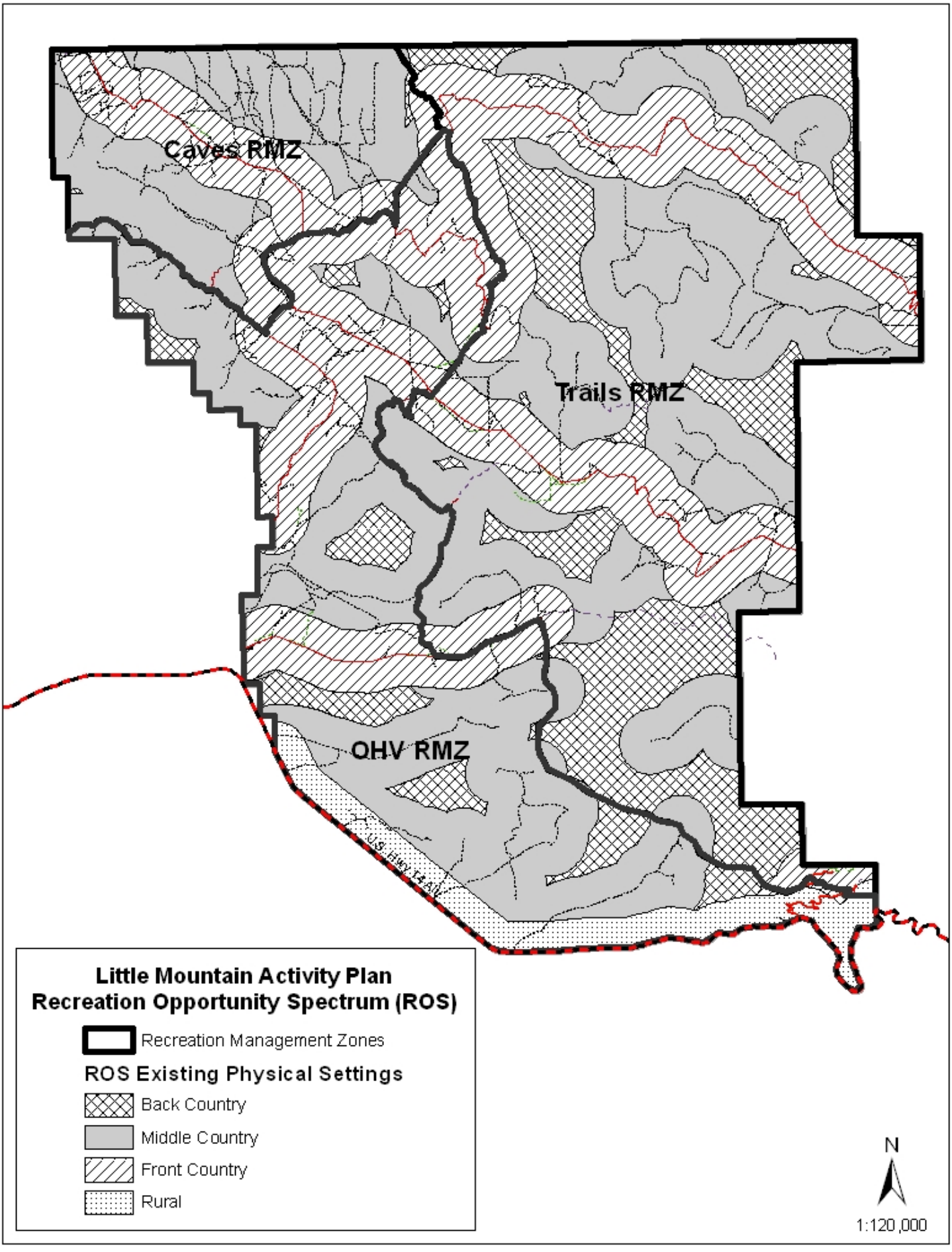
	Primitive		*Back Country*	*Middle Country*	*Front Country*	*Rural*	*Urabn*
	Pristine	*Transition*					
a. Remoteness:	More than 10 miles from any road	More than 3 miles from any road	More than ½ mile from any kind of road, but not as distant as 3 miles, and no road is in sight	On or near four-wheel drive roads, but at least ½ mile from all improved roads, though they may be in sight	On or near improved roads (possibility gravel), but at least ½ mile from highways	On or near primary highways (possibility paved), but still within a rural area	Municipal street and roads within towns or cities
b. Naturalness:	Undisturbed natural landscape		Naturally-appearing landscape having modifications not readily noticeable	Naturally-appearing landscape except for obvious primitive roads	Landscape partially modified by roads, utility lines, etc., but none overpower natural landscape features	Natural landscape substantially modified by agriculture or industrial development	Urbanized developments dominate landscape
c. Facilities:	None		Some primitive trails made of native materials such as log bridges and carved wooden signs	Maintained and marked trails, simple trailhead developments, improved signs, and very basic toilets	Improved yet modest, rustic facilities such as campsites, restrooms, trails, and interpretive signs	Modern facilities such as campgrounds, group shelters, boat launches, and occasional exhibits	Elaborate full-service facilities such as laundry, restaurants, and groceries.

SOCIAL – VISITOR USE & USERS: character of recreation-tourism use

	Primitive	*Back Country*	*Middle Country*	*Front Country*	*Rural*	*Urban*
d. Contacts (with other groups):	Fewer than 3 encounters/day at camp sites and fewer than 6 encounters/day on travel routes	3-6 encounters/day off travel routes (e.g.,campsites) and 7-15 encounters/day on travel routes	7-14 encounters/day off travel routes(e.g., staging areas) and 15-29 encounters/ day en route	15-29 encounters/day off travel routes(e.g., campgrounds) and 30 or more encounters/day in route	People seem to be generally everywhere.	Busy place with other people constantly in view.
e. Group Size (other than your own):	Fewer than or equal to 3 people per group	4-6 people per group	7-12 people per group	13-25 people per group	26-50 people per group	Greater than 50 people per group
f. Evidence of Use:	Only footprints observed. No noise or litter.	Footprints and bicycle tracks observed. Noise and litter infrequent. Slight vegetation trampling at campsites and popular areas. Fire rings seen.	Vehicle tracks observed. Occasional noise and litter. Vegetation and soils becoming worn at campsites and at high-use areas.	Vehicle tracks common. Some noise and litter. Vegetation and soils commonly worn at campsites, along travel routes and at popular areas.	Frequent noise and litter. Large but localized areas with vegetation damage and soil compaction.	Unavoidable noise, music and litter. Widespread vegetation damage and soil compaction.

ADMINISTRATIVE – ADMINISTRATION & SERVICES: How Public Land Managers, Cooperative Agencies and Local Businesses Care for the Area and Serve Visitors

	Primitive	*Back Country*	*Middle Country*	*Front Country*	*Rural*	*Urban*
g. Mechanized Use:	None whatsoever.	Mountain bikes and perhaps other mechanized use, but all is non-motorized	Four-wheel drives, all-terrain vehicles, dirt bikes, or snowmobiles in addition to non-motorized, mechanized use.	Two-wheel drive vehicles predominant, but also four wheel drives and non-motorized, mechanized use.	Ordinary highway auto and truck traffic is characteristic.	Wide variety of street vehicles and highway traffic is ever-present.
h. Visitor Services:	None is available on-site.	Basic maps, but area personnel seldom available to provide on-site assistance	Area brochures and maps, plus area personnel occasional present to provide on-site assistance.	Information materials describe recreation areas and activities. Area personnel are periodically available.	Information described to the left, plus experience and benefit descriptions. Area personnel do on-site education.	Information described to the left, plus regularly scheduled on-site outdoor skills demonstrations and clinics.
i. Management Controls:	No visitor controls apparent. No use limits. Enforcement presence very rare.	Signs at key access points on basic user ethics. May have back country use restrictions. Enforcement presence rare	Occasional regulatory signing. Motorized and mechanized use restrictions. Random enforcement presence.	Rules clearly posted with some seasonal or day-of-week use restrictions. Periodic enforcement presence.	Regulations prominent. Total use limited by permit, reservation, etc. Routine enforcement presence.	Continuous enforcement to redistribute use and reduce user conflicts, hazards, and resource damage.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Trails RMZ
OHV RMZ
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Little Mountain Activity Plan
Recreation Opportunity Spectrum (ROS)
Recreation Management Zones
ROS Existing Physical Settings
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Middle Country
Front Country
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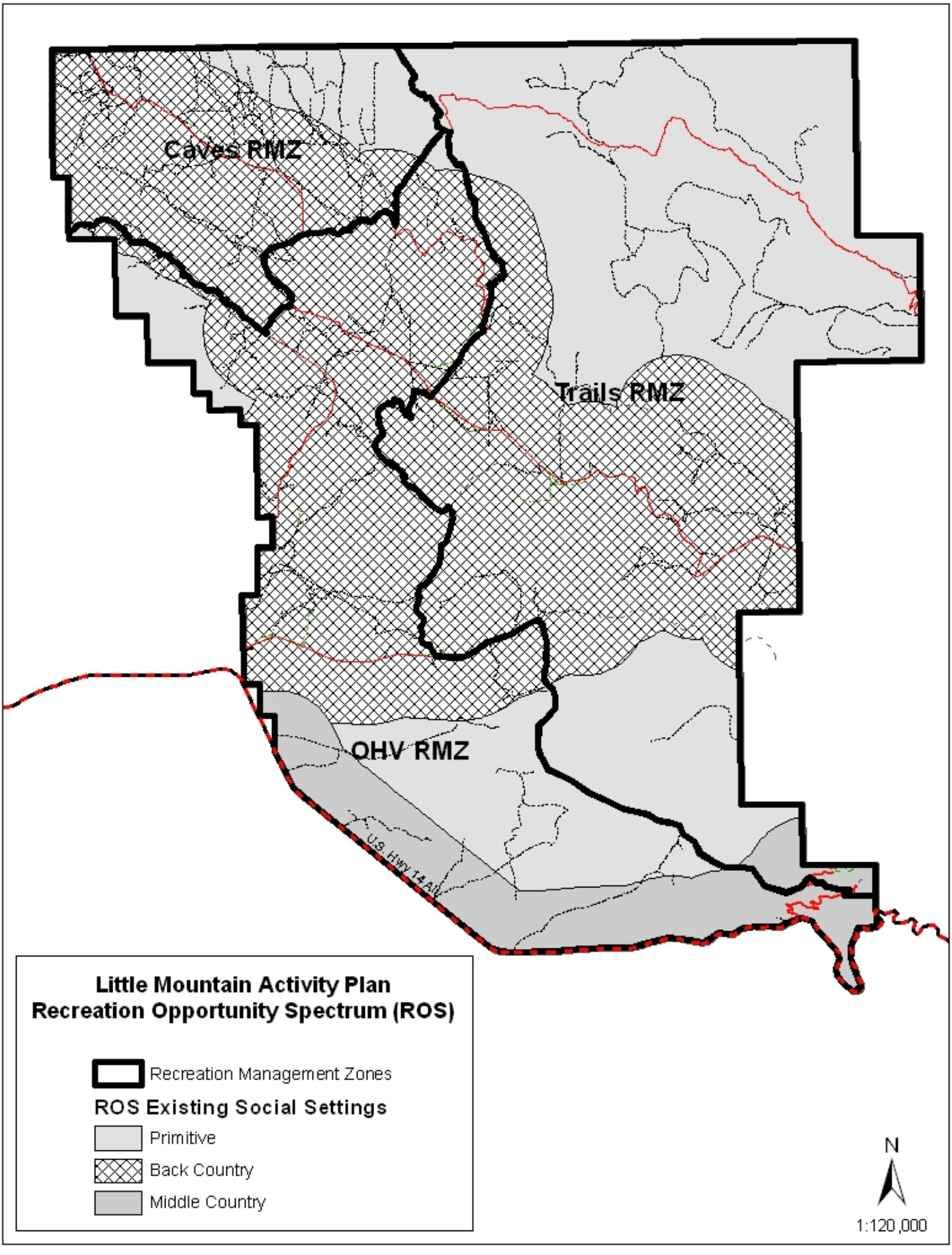
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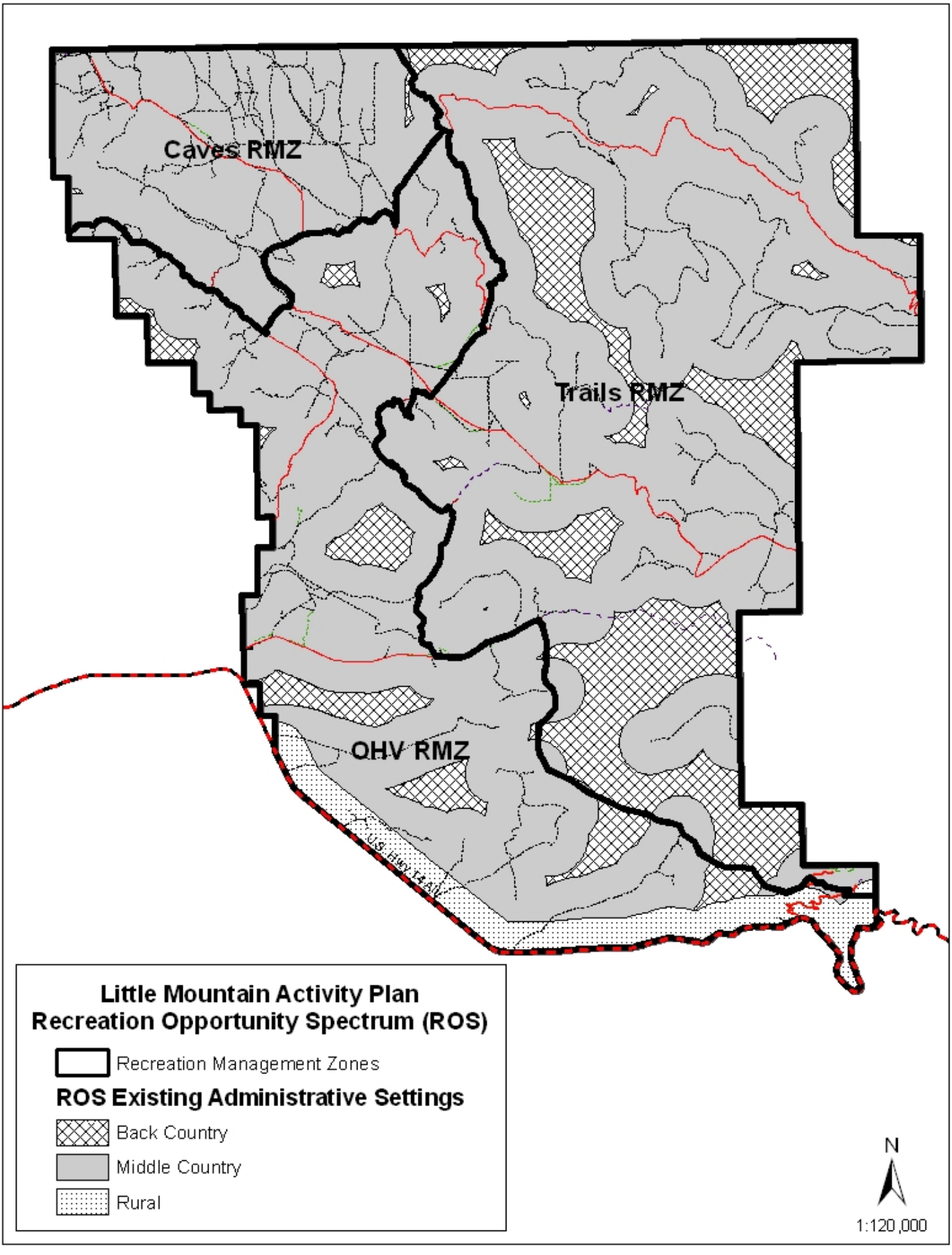
Caves RMZ
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OHV RMZ
US Hwy 14 AU
Little Mountain Activity Plan
Recreation Opportunity Spectrum (ROS)
Recreation Management Zones
ROS Existing Administrative Settings
Back Country
Middle Country
Rural
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Appendix 2

Little Mountain Activity Plan and Off-Highway Vehicle Route Designations
Public Comment Summary and Response

GENERAL	PUBLIC COMMENT	BLM RESOLUTION/RESPONSE
	Enforcement is difficult with only one Law Enforcement Ranger. If there is no enforcement all will be in vain. Some people need tickets to get their attention	Enforcement is addressed in the plan on page 36. Monitoring would help identify Law Enforcement emphasis areas as described and cooperative agreements with other land management agencies would be utilized to enhance patrol and emergency response within the planning area.
	Additional private land is for sale in the Little Mountain area, BLM should consider acquiring this land.	The Devil's Canyon Acquisition is described in the EA on page 17. Consideration of additional land acquisition is beyond the scope of this planning effort.
	Comments expressed a concern for resource protection for future generations and indicate that motorized access and unlimited recreational access (including mountain bikes) leads to wildlife disturbance, habitat fragmentation, invasive exotic weed proliferation and watershed degradation. Commentors would like to see additional road closures to reduce the impacts of motorized vehicles to all resources, especially wildlife, vegetation, soils and water resources. Four-wheeler use on Little Mountain is getting out of hand; something needs to be done to curb them. For example, bird hunters are driving cross-country along the timber line. Minimize roads within the planning area. One route suffices to each area. Please close roads causing erosion such as the road over the top of Mexican Hill.	The Cody RMP ORV decision limited travel in this area to protect resources including soils, wildlife, cultural and visual resources. The proposed alternative would implement the RMP decision in accordance with criteria in 43 CFR 8340 – Off Road Vehicles, and the criteria identified in the Plan on page 27. Limiting vehicles to a network of designated routes allows for motorized vehicle use in the area, while protecting resources.
	The monitoring section of the plan states "The determination of whether resource damage has occurred is left to the discretion of the Field Managers and Law Enforcement personnel." Commentors would like additional language in this section that managing personnel will document any resource damage resulting in a citation.	See additional wording in the plan on page 35.

TRAVEL MANAGEMENT	PUBLIC COMMENT	BLM RESOLUTION/RESPONSE
	Amend the final objective of "Travel Management Goals and Objectives" to read, *"Identify future planning needs and opportunities related to travel management* **and OHV recreation**"	The activity plan is based on the concept of "comprehensive travel management" as described in the plan on page 5. Comprehensive travel management recognizes that the roads and trails on BLM-managed public land serve multiple uses and help facilitate a variety of management objectives. OHV recreation is a valid use of public land and is included in the Travel Management Goals and Objectives as follows: "Provide access for a wide variety of recreational activities on public land."
	A closure that is enacted because of user conflicts must be based on documented and investigated conflicts. It should also be demonstrated that there was an attempt to facilitate this conflict including a public notice of such facilitation to inform affected parties.	See the monitoring section of the plan on pages 34-35. Any modifications or additions to the route designations would be done through the appropriate level of NEPA analysis and the associated opportunities for public involvement.
	We disagree with allowing some of the existing roads to be left available to "administrative use only," as proposed in Alternative 1. We support the portion of Alternative 2 in which these roads are closed to motorized vehicles, since most of these roads travel to destinations that can be reached by other roads. Administrative use of these roads will generate attention by unauthorized users, who will consequently travel on them, and some of these roads are in locations that cannot be easily gated. The specific roads are: 1) head of Oasis Springs Creek (sections 6 and 7, T57N, R93W), 2) Harmon Springs to Cottonwood Creek Road (section 1, T56N, R94W), and 3) Cottonwood Road north toward Simmons Canyon then west (sections 32 and 33, T57N, R93W).	We recognize that there are potential negative public perceptions related to administrative vehicle use. In response to public comment, the "Administrative Use Only" category of route recommendations was removed from the plan, EA, and the maps. Administrative use will be managed as specified in 43 CFR 8340, and described in the plan on page 38. The routes shown as "Administrative Use Only" in Draft Alternative 1 and 2 maps were changed to either "Closed to motorized vehicles" or "Open to motorized vehicles" as shown on the final Little Mountain Travel Management Map.
	Commentors questioned why we are proposing to close the road along Simmons Canyon. This road does not get a lot of use, there are no safety concerns and closing this road would limit vehicle access into this area.	There are two roads near Simmons Canyon. The road beginning in T.57N., R.93W., Sec. 23 and heading south to Sec. 34 is proposed for closure to protect wildlife habitat and soils, this road is also within the "Trails Zone" where emphasis was placed on opportunities for non-motorized recreation. The road beginning in T.56N., R.93W. Sec. 5 and heading north toward Simmons Canyon then west to T.57N., R93W. Sec. 32 was originally proposed for "Administrative Use Only" and has been changed to "Open to motorized vehicles" based on public comment and input from the interdisciplinary team of resource specialists.
	Commentors questioned why we are proposing to close roads around Mexican Hill and provided the following information: - the road over the top is a shortcut, provides great views, and is an alternate route when other roads are drifted in. - the road around the south provides a good loop around	A detailed analysis of all of the roads around Mexican Hill was conducted by an interdisciplinary team of resource specialists. The main route from the Bighorn National Forest is to the north of Mexican Hill, this route is proposed as a designated access route. The two roads over the top of Mexican Hill are proposed for closure to protect resource values (soils, vegetation) and to reduce erosion. The road around the south of Mexican Hill is proposed for closure to enhance

	the mountain. - All of these roads connect to roads on the forest, they don't just dead end. - Even if they are closed, it could take 50 years for the roads to disappear or grow sagebrush.	wildlife habitat and nonmotorized hunting and other recreational opportunities. Route rehabilitation methods for closed routes are discussed in the plan on page 32 and may be implemented to speed the rehabilitation process as necessary.
	Some sections of roads are proposed for closure because they are not the main route, but some of them are smoother than the main route and it would be nicer to leave them open and close the others.	The objectives of limiting vehicles to designated routes include eliminating duplicate routes to the same location and reducing resource impacts associated with vehicle use. Assessment of the maintenance needs on designated routes would be done on a case-by-case basis, as described in the plan on page 37. Implementation of the plan will provide an opportunity to assess the condition of the designated routes. If necessary, minor adjustments to the route designations or route maintenance could be considered.
	We could find no discussion in the EA or the Plan of routes which were designated as existing routes under the RMP versus all other routes which were illegally created and/or used by motor vehicles. How were illegal routes dealt with in the EA and the Plan? Under the RMP, no routes except recognized, existing routes at the time of the RMP adoption can be used by motorized vehicles (RMP p.22).	A comparison of the current route inventory with the 1994 digital orthophoto quads and the 1989 air photos was conducted to determine if any unauthorized routes had been created since 1990, the date of completion of the Cody RMP. The review resulted in identification of five segments of unauthorized, user created routes, each less than ¼ mile in length located in T. 57 N., R. 94 W. Sec. 13, T. 58 N., R. 94 W. Sec 20, 25, 27, and T. 58 N., R. 93 W. Sec. 24. The five unauthorized route segments are recommended for closure in Alternatives 1 and 2 of the environmental assessment. See clarification on page 6 of the EA.
	The activity plan contains a list of "criteria for consideration of route closures", but none of the criteria is for the closure of illegal, user created routes.	The suggested criteria was added to the plan on page 28.
	Signs are needed right away to inform public as chaos reigns currently.	Initial implementation of the plan is anticipated in the summer of 2007, this would include signing routes on-the-ground. The final travel management map would be posted on the entry point kiosks and made available to the public as a handout to help facilitate understanding and compliance with the route designations.
	It appears that the priority is on closing routes or pointing out where BLM ends. We recommend you start the signing with those routes on BLM that are open. If you start the signing process installing "closed to motorized vehicles" first, then the OHV community is going to see the "travel management activity plan" as the "curtail travel management activity plan"	The three phases of implementation described in the plan on pages 37 - 38 are based on geographic location, as implementation progresses, all routes ("Open", "Closed" and "ATV Only") would be signed within the geographic area. The intent of the phased plan implementation is to guide implementation of route designations over many acres.
DEVIL'S CANYON ACCESS	**PUBLIC COMMENT**	**BLM RESOLUTION/RESPONSE**
	The comments expressed a variety of opinions regarding access to Devil's Canyon as follows: Leave the Devil's Canyon access as is, or buy the private land and allow ATV, foot and horseback access.	Management of the Devil's Canyon Road and Gate involves complex management considerations including public safety, legal public access, administrative access needs and protection of important resources including suitable wild and scenic river segments, riparian vegetation, and cultural resources. Background information is provided in the EA on page 19-20 and analysis of the alternatives is provided in

	Support allowing limited public access into Devil's Canyon with non-motorized methods and through controlled ATV access (Alternative 3). This appears to be the safest and fairest option. A commentor expressed concern about BLM becoming involved in the Devil's Canyon road – it has been used by the private land owner for many years and now BLM wants to let anyone and everyone use the road, this road is important to the livelihood of the private landowners, will BLM help maintain the road if it gets damaged by use or washed out? Support closing canyon areas to motorized transport to help preserve the land and habitat.	the EA on pages 45, 54, 55, and 57. The following clarification was added to the EA regarding public access to the Devil's Canyon Gate: "A legal public access route to the gate would be pursued for development in the future as described in the plan." See the plan page 40.
SEASONAL CLOSURE		
	Clarify that the original request from Wyoming Game and Fish Department was for a winter vehicle closure between December 1 and March 31, not April 30 as stated in the EA.	The exact wording in the letter from the Wyoming Game and Fish dated April 22, 2005 was: "We recommend a seasonal road closure (December 1 – March 31) for those roads on top of the Little Mountain property recently acquired by the BLM, and stress the importance of this area to wintering wildlife. Depending on weather conditions, wildlife move to the area earlier than December and often stay later than April, so these dates are the *minimum* that should be implemented, April 30 or May 15 would be more appropriate ending dates to this seasonal closure to protect important wildlife habitats and behaviors." This information has been corrected in all discussion of the seasonal closure throughout the plan and EA.
	Support the seasonal closure on top of Little Mountain as proposed in Alt 1, with administrative flexibility, or Alt. 2 without administrative flexibility. Could agree with the seasonal closure with allowances for modified closure dates, if: 1) weather conditions (i.e., temperature and wind) are mild for a given time of year, 2) snow accumulations (drifts) are not blocking designated access roads to the top of Little Mountain, and 3) concentrations of wintering wildlife are not observed during surveys routinely (weekly) conducted across the area. Wyoming Game and Fish Department personnel are available to assist with some of these surveys.	The proposed action is to implement the seasonal closure as described in Alternative 1, with administrative flexibility. Prior to implementation of the seasonal closure, specific parameters would be set regarding consideration for flexibility of closure dates including weather conditions, snow accumulation and wintering wildlife observations. See clarification in the EA on page 12.
	In some instances, existing or proposed gates are located where turning a vehicle around may be impossible or unsafe. We recommend the BLM either post closure signs below closure gates (near safe turn-around locations), create safe turn-around areas near existing gates, or move gates to a	The approximate seasonal closure gate locations are shown on Maps 1 and 2, actual gate locations would need to be determined on-the-ground during implementation to ensure adequate vehicle turn around points. This clarification was added to all discussion of the seasonal closure gates in the plan and EA.

	safer location. Given their life expectancy, gates should be constructed of heavy-duty materials, and law enforcement personnel should be highly visible in the area during periods of high visitor activity.	
COTTONWOOD CREEK TRAIL		
	Some comments expressed support for restricting travel along the Cottonwood Creek trail to foot and horse only. They expressed the following concerns regarding safety hazards and conflicts between mountain bikes and horses on this trail: - limited sight distance - steep terrain - narrow trail - potential for serious accidents - no easy way to pass - high speed of mountain bikes. They encouraged adoption of the Mountain Bike Use section on page 29 of the Draft Activity Plan and Alternative 1 on page 11 of the EA. Pete's Canyon trail located a few miles to the west of Cottonwood was suggested as an alternative route for mountain bikes. This trail is not a good horse trail so the likelihood of conflict would be minimal. Other comments expressed opposition to restricting travel on the Cottonwood Creek Trail to foot and horse only: The comments encouraged implementation of that portion of Alternative 3 that allows mountain biking to continue on Cottonwood Creek Trail with educational effort to mitigate potential user conflicts on the trail. Commentors note that mountain bike riders and horseback riders share trails throughout the Bighorn Basin and Bighorn Forest without conflict. Mountain bikers have encountered horses on the Bucking Mule Falls/Devil's Canyon Trail on the Bighorn Forest on many occasions. The Bucking Mule Trail is much more technical than Cottonwood Creek Trail. - commentors disagree with safety concerns of limited sight distance as a reason to exclude mountain bikes. Sight distances vary on the Bucking Mule Falls/Devil's Canyon and Bench Trails, Cottonwood Creek Trail is actually very open and sight ability is great. - commentors disagree that steep grades are a safety	The Cottonwood Creek Trailhead is currently being developed primarily as an equestrian camping area and trailhead. Due to the current and anticipated future concentration of equestrian use on this trail, and the potential for serious safety hazards, mountain bikes will not be allowed on this trail.

	concern related to mountain bike use on Cottonwood Creek Trail, they note that steep slopes will actually cause most mountain bike riders to apply brakes when going down hill. The rough terrain and loose "marbles" on these slopes are more than most mountain bikers can handle. Speed, going up hill or down, will not be an issue with most mountain bikers. The steepness does bring up a concern about erosion. Monitoring should occur on a regular basis to ensure sustainability of the trail. - Alt 1 implements the drastic step of single-use designation prematurely, before any conflicts between users have occurred and before any education efforts have been implemented. Refer to monitoring section of the Little Mountain Plan (p35) Alt 3 encourages all users to cooperate in using the Cottonwood Creek Trail, while Alt 1 creates conflict. Alt 1 implies that horse and mountain bike riders are incompatible. Alt 3 emphasizes that mountain bicyclists, and equestrians, are "members of a larger trails community" (quoted from BLM's National Mountain Bicycling Strategic Action Plan (SAP). Commentors would like to partner with BLM toward implementing educational efforts mentioned in alt 3. and promoting trail ethics throughout the Bighorn Basin. By prohibiting mountain bikers from using the Cottonwood Creek Trail, the BLM is eliminating a possible source of trail volunteers. Management Goal #4, Action Item #4 of the Mtn Bike SAP encourages use of mountain bikers in trail work and the draft Little Mountain Plan encourages using volunteers in implementation of the Plan (p39). Commentors are concerned about safety of all trail users. They are also concerned about being prohibited from trails without cause, and the precedent it sets.	
	The Cottonwood Trail is a great public access route through BLM lands and then onto the Bighorn National Forest. The Cottonwood Trailhead, currently under construction, represents a significant investment of public and private resources. The partnerships you have facilitated with Big Horn County and the Shoshone Back Country Horsemen are commendable. This will soon be a first class trailhead and exceptional	The BLM Cody Field Office welcomes public involvement in all aspects of land management and planning. We look forward to continuing the existing partnerships and exploring opportunities to develop additional partnerships within the local communities.

	scenic trail up Cottonwood Creek to the Bighorn National Forest.	
WILD & SCENIC RIVERS		
	Comments expressed support for efforts to designate Porcupine Creek as a Wild and Scenic river as long as the designation does not impede future management and restoration efforts in the drainage for native Yellowstone cutthroat trout.	See explanation of the Wild and Scenic River designation process and the current status of these designations in the plan on p. 5 and 21, and in Appendix 1 of the plan.
FISH & WILDLIFE		
	Consideration should be given in planning efforts to protect these waters (Porcupine Creek and its tributaries: Trout Creek, and Deer Creek) and their riparian habitat. Waters containing Yellowstone cutthroat trout should be given special attention as their range has been greatly reduced by genetic introgression, habitat degradation and other anthropogenic impacts, and efforts to list it as an endangered species are ongoing. Vehicle access should not compromise stream stability or increase sediment transport to the riparian area along Porcupine Creek and other tributaries where vehicle access may be retained.	These waters are provided a variety of protections through the special designations including Wild & Scenic River Suitable segments and the Little Mountain ACEC. Limiting travel to designated roads, as proposed in the plan would also limit erosion and potential impacts on stream stability, see discussion in the EA on pages 26-28.
NEPA	**PUBLIC COMMENT**	**BLM RESOLUTION/RESPONSE**
	Some comments encouraged development of a new hybrid alternative for the Little Mountain Activity Plan and Off-Highway Vehicle (OHV) Route Designations that incorporates elements of each of the draft alternatives. Other comments expressed general support for Alternatives 1, 2, and 3.	We feel that a reasonable range of alternatives was considered in the EA based on the scope of the existing decision to be implemented (limiting travel to designated roads and trails). The Final Little Mountain Activity Plan and Off-Highway Vehicle Route Designations incorporates elements from Alternatives 1 and 2, the changes made to the proposed action were based on public comment and are described in this public comment summary and response table.

	The method in which Alt. 3 is written by means of the colossal environmental impacts concerns us. It gives the reader the clear impression that access and protection of resources can not exist simultaneously. We do not agree with that mind set and therefore, we wonder if the BLM might draft or consider an access-resource protection alternative? The average citizen of the State of Wyoming desires their land management agencies to support access and multiple recreational use on their public lands while at the same time discouraging any type of resource damage. Should ORV use be decreased in areas in order to protect resources then please find alternative routes that would be suitable.	Limiting motorized vehicles to a network of designated routes allows for motorized vehicle use in the area, while protecting resources. The proposed action provides a balance between motorized and non-motorized uses by maintaining a variety of recreation opportunities in the planning area such as non-motorized trail opportunities, vehicle touring on well defined roads, and the use of challenging ATV routes.
	Comments expressed disappointment that a map of Alternative 3 was not produced, leading to the obvious conclusion that this alternative would not receive appropriate consideration despite the public's commentary or participation.	See clarification in the EA on page 13. In alternative 3, all of the existing routes would be designated as open for motorized vehicles. All of the existing routes are shown on Maps 1 and 2, for this reason, a third map was not produced. All necessary information was provided for public review and this in no way limits consideration of alternative 3 as a viable alternative within the NEPA process.
RECREATION	**PUBLIC COMMENT**	**BLM RESOLUTION/RESPONSE**
	The travel management plan should allow reasonable angler public access during periods when weather conditions are conducive for safe travel. Certain roads within the Little Mountain management area can be unsafe under certain weather conditions and should not be open to the public or should be managed with seasonal closures. Assessment of road use should be based upon the ability to provide safe access.	The proposed network of designated vehicle routes and non-motorized trails provides public access to a majority of the planning area. Implementation of the seasonal closure from December 1 through April 30, in the higher elevation areas, would help limit travel during those times when weather conditions may not be conducive for safe travel. The proposed education/information efforts would include tips for low impact OHV use and outdoor ethics.
	Commentors expressed a need to protect and manage the unique and non-renewable cave resources within the planning area.	Travel designations will help protect cave resources. Future site specific cave management plans will be developed with volunteer assistance. Cave management is currently guided by the Worland Caves Management Plan and cave resources are protected by withdrawals and the Little Mountian ACEC. Plan p.7 and 19
	Some comments expressed opposition to considering opportunities to designate OHV "open areas" during the RMP revision, others supported identification of open areas and encouraged consideration of open areas and /or motorized single track trails within the Little Mountain Planning area.	The decision to limit vehicles to designated routes or to allow for open OHV areas is a land use allocation decision that must be made at the RMP level of planning. This activity plan is implementing the decision made in the 1990 RMP. Designation of open areas is beyond the scope of this planning effort but could be considered during the upcoming RMP revision.